Civil liberties under pressure?

The determinants of citizens' attitudes towards civil liberties policies

Felix Jäger

Inaugural dissertation submitted in partial
fulfillment of the requirements for the degree
Doctor of Social Sciences
in the
Graduate School of Economic and Social Sciences
at the
University of Mannheim

Doctoral committee composed of:

Prof. Dr. Richard Traunmüller (supervisor and evaluator)

Prof. Dr. Marc Helbling (supervisor and evaluator)

Prof. Dr. Conrad Ziller (evaluator)

Dean of the school of social sciences:

Dr. Julian Dierkes

Day of defense:

December 3, 2025

Abstract

Civil liberties are in danger in many Western democracies. This cumulative dissertation examines the determinants of citizens' support for restrictive civil liberties policies in the face of political, societal, and emotional challenges. I argue that citizens' willingness to accept cuts in civil liberties is largely shaped by political actors. Across three original survey experiments conducted in Germany and nine European countries, the dissertation investigate how political alignment and affective polarization as well as threat perceptions and emotional reactions shape the trade-off between security and freedom. The first study analyzes responses to terrorism and counter-terrorism policies, showing that citizens' willingness to accept restrictions of civil liberties is strongly influenced by partisan alignment with policymakers. The second study addresses how threat communication by politicians can influence preference for security over freedom, employing an innovative parallel encouragement design to causally test the mediating effect of emotions. Contrary to expectations, neither anxiety nor anger significantly mediates the effect of communicated threat on preferences for security over freedom. The third study examines the impact of affective polarization on support for civil liberties policies. It demonstrates that strong partisan animosity increases citizens' willingness to abandon their preferred positions on civil liberties when those positions are endorsed by political out-groups. Together, these studies advance our understanding of how political context, partisan divides, perceived threats and emotional responses shape public attitudes toward civil liberties, highlighting both the resilience and fragility of these fundamental rights in contemporary democracies.

Acknowledgments

When I started my studies, I never imagined doing research myself, let alone writing a dissertation one day. My interest in research began in the final year of my undergraduate studies, in a class on data visualization. Following that, I conducted my first survey for my bachelor's thesis, doing real quantitative political science research for the very first time. This would never have happened without Richard Traunmüller, who taught that class, sparked my interest in research, and later encouraged me to begin my dissertation. I am thankful for his support over the years, often demanding, but always encouraging and honest.

The second person who shaped my path is Marc Helbling, who granted me the freedom to pursue my research interests and supported my academic journey. I am thankful for his advice and the outstanding research atmosphere he created at his chair, which turned into helpful discussions and relaxing chair lunches. I further thank Conrad Ziller, who joined my committee without hesitation.

I am grateful to the many colleagues at MZES. I was fortunate to have a great co-author, Sandra Morgenstern, with whom I worked on the second paper of this dissertation. Through our numerous discussions about the project and how to move it forward, I gained a new perspective on doing research. Working together was not only productive but also a lot of fun! Another great colleague is Roni Lehrer, who was always supportive and generously provided me with survey space, without which my final chapter would not have been possible.

Along the way, I made many new friends, which makes me very happy. Being it back in Bamberg where I met Valentin, Marcella, Laura, Theresa, Bruno, Robin, Basti and Felix; in the Graduate school: Elisabetta, Lukas and Jan; at the MZES: Korinna, Thomas, Frieder, Mary, Nina and Nicole; or at the Cluster in Konstanz, my new academic home: Prateek, Nanna, and Steffi.

I am also very grateful for the support I received from outside of academia. First, I

would like to thank my parents, who have supported me throughout my entire life (and who will be very happy that this chapter finally concludes). I thank my brother, family and friends, who cheered me up in rough times often without them knowing.

Finally, I owe large thanks to Diana, who was by my side through all the ups and downs. Her support kept me going when I did not believe that I have a contribution to make. We found joy in celebrating each step along the way, however small it seemed.

Contents

List of Figures

List of Tables

Introduction

Civil liberties are in danger in many Western democracies (Bermeo 2016; Valentim et al. 2025; Waldner & Lust 2018). Multiple crisis have shaped the first decades of the 21^{st} century which led to cuts into civil liberties: international terrorism and the attacks on 9/11 proposed a threat to security, large scale immigration were seen as threat for security, jobs and culture and the COVID-19 pandemic threatened personal health. In these contexts, governments curtailed civil liberties in the name of safety. In the aftermath or during these crisis, the support for restrictive policies was wide. For example, during the pandemic surveillance in the form of contact tracing mobile applications was widely used and supported by the general public (Amat et al. 2020; Jørgensen et al. 2021; Vasilopoulos et al. 2023).

However, civil liberties should not be given up easily as they constitute one of the cornerstones of democratic societies. They ensure that individual freedoms are protected from arbitrary power, especially from the state (Berlin 1969). In democracies, these liberties form the ethical and legal backbone that allows citizens to participate freely, dissent safely, and hold authorities accountable. Without civil liberties, democracy becomes a facade where voting may exist, but freedom is suppressed, and public power goes unchecked.

Studying attitudes toward civil liberties is essential because these attitudes reveal how deeply democratic values are internalized within a society. They influence how robustly freedoms are upheld, especially during times of crisis, polarization, or anxiety. The importance of civil liberties is not just something theoretical, but something citizens value widely. The vast majority considers them as very important, which can be seen in Figure 1a. Understanding public support for civil liberties helps to assess the state and health of democracy. Even with constitutional protections, if large segments of the population are willing to trade freedoms for security or order, democracy becomes fragile. A stable democracy requires citizens that support democratic ideas and practices, such as civil liberties, to increase prospects of a stable democracy (Dahl 1998; Welzel & Inglehart 2009).

To defend a democracy when it is challenged or denied, emancipative attitudes can motivate mass action (Welzel 2007).

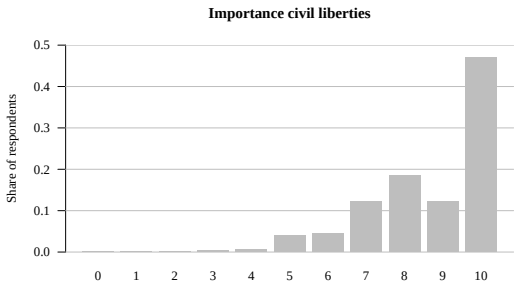
Based on the importance of civil liberties for democracy, it is expected that attitudes towards civil liberties are "crystallized attitudes" (Tesler 2015). These attitudes can become salient through different impulses, such as communication by elites or coverage in the news, and should be very stable. This stability in attitudes would enable citizens to withstand the influence of political actors (M. J. Cohen et al. 2023). However, two aspects of civil liberties challenge the argument that attitudes towards civil liberties are crystallized. First, civil liberties must be viewed from a trade-off perspective. Depending on the current societal circumstances, citizens might have good reason to trade civil liberties for other goods. Second, civil liberties must be examined as specific and concrete policies. For specific policies, citizens attitudes might not be crystallized. Therefore, their general importance evaluation might not translate into support against individual policies that undermine civil liberties (Freeder et al. 2019).

While citizens are expected to strongly support civil liberties, this does not match their support for restrictions that are actually happening. This mismatch raises the guiding question for the dissertation: *When and under which circumstances do citizens commit to civil liberties and when do they value other goods more strongly?*

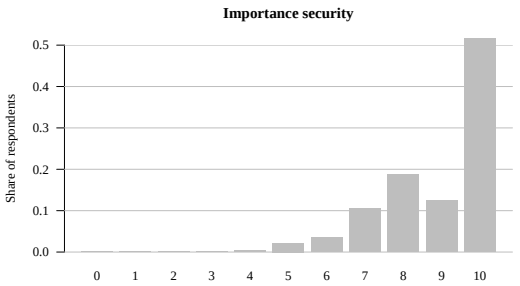
To answer that question and understand citizens' support for civil liberties, it is necessary to investigate civil liberties from a trade-off perspective and for specific policies. Civil liberties always inherit the conflict between individual freedom and other societal goals, such as order and security. A democracy requires both, freedom rights and order. Depending on how citizens rank these competing values, their support for civil liberties differs (Gibson & Bingham 1985; Peffley et al. 2001). Therefore, civil liberties cannot be studied as independent rights, since they impose a conflict with other values. In fact, it's not general rights that are conflicting with each other, but government methods of maintaining law and order that could challenge civil liberties (Davis & Silver 2004).

The relevance of the trade-off perspective becomes clear when citizens are asked how important competing values are and how they evaluate the trade-off between the two. As Figure 1a and Figure 1b show, both civil liberties and security are very important to citi-

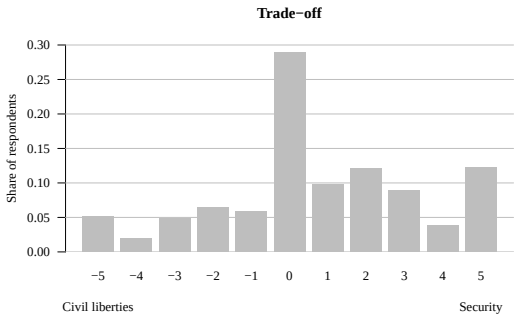
zens. Very few people, less then two percent, are ascribing an importance rating below the midpoint. The mode for both, security (51 percent) and civil liberties (47 percent), is ten, the highest point of the scale, indicating highest importance. In contrast Figure 1c shows the distribution of answers when both questions are combined into one, which requires respondents to evaluate the trade-off between the two. Many respondents selected the midpoint (29 percent), indicating no preference in either direction. At the same time, 24 percent prefer civil liberties to some degree (five percent with very strong preference) and 47 percent prefer security to at least some degree (12 percent with very strong preference).



(a) Importance rating of civil liberties.



(b) Importance rating of security.



(c) Trade-off between civil liberties and security.

Figure 1: Citizens importance judgments of civil liberties, security and the importance between the two. Data from nine European countries (CZ, DE, ES, IE, NL, PL, SE, GB) with $N = 11,894$ respondents.

Those trade-offs manifest in policies that translate general civil liberties into specific applications. The generally high support for civil liberties only converts to support for

some policies, while there is no support for others. The general support to democratic values, like civil liberties, is highly dependent on other issues, such as threat to national or personal security (Davis & Silver 2004). For example, in a study by Rykkja et al. (2011) general support for civil liberties only predicts support for keeping people in custody without trial, but not phone tapping or randomly stopping and searching people. Focusing on specific policies has also the practical implication, that civil liberties are abstract, complex and remote from citizens daily lives (Peffley et al. 2001). In comparison, judgment of specific policies, is easier as they are more tangible.

When viewing civil liberties as trade-off that manifest in specific policies, political actors are designated to play an important role in this process. They are responsible to create specific civil liberties policies based on general civil liberties rights. While the general support for civil liberties is very high (see Figure 1a), when it comes to the specific policies and their details, e.g. who exactly can be observed and under which conditions, the support by citizens differs strongly. The policymakers take the central role in this process, as they create, promote, and communicate these specific policies to the public.

My central argument is that the importance of policymakers has not been acknowledged to the necessary extent, when it comes to factors that influence citizens' attitudes towards civil liberties policies. The role of the policymakers is visualized in Figure 2. While an external shock or some form of crisis initially and directly effects citizens' attitudes, it comes down to the policymakers who shape the aftermath. What influences citizens attitudes are the policymakers. They evaluate the situation and communicate their interpretation to the general public. They are also responsible for the policies with their respective details which in turn are judged by the general public. The impact of policymakers and their policies on citizens' attitudes does not only depend on the content of the policy and how it is communicated, but also citizens' perceptions of the policymakers. The most important one is their ideology and party affiliation, which acts an anchor for citizens when evaluating specific policies.

Figure 2 also shows how the three chapters contribute to the broader argument and to the overarching question. The first chapter opens the topic of the dissertation with a broad research angle on the question of support towards civil liberties. In this chapter, I investi-

gate the direct effect of an external shock and the reaction of policymakers. It establishes the importance of policymakers when it comes to citizens' attitudes towards civil liberties. Their impact is examined in detail in the following two chapters. In the second chapter, I focus on the communicative element: how do policymakers communicate a threatening situation and whether emotions do act as a mediator in the preference formation. The third chapter is centered around the ideology of policymakers and citizens affective polarization, which strongly shapes citizens' attitudes towards civil liberties policies.

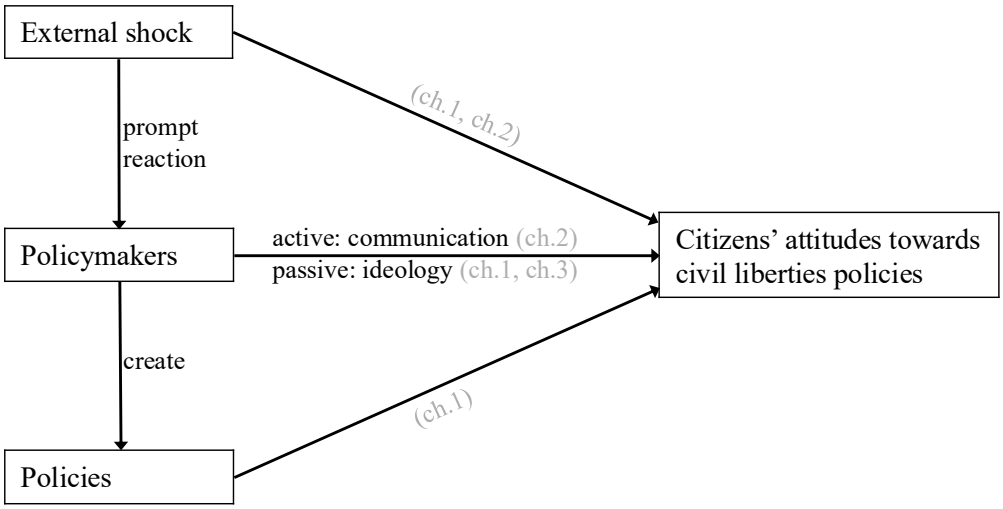


Figure 2: Overview of the theoretical argument centered around policymakers. Grey brackets show how each chapter contributes to the overarching question.

All three chapters rely on original surveys of the general public, carried out in Germany for the first two studies and in nine European countries for the third. Across these contexts, I employ a variety of survey experiments. In the first chapter, I rely on short vignettes, which allow for a manipulation of several elements that are expected to shape support for civil liberties. In the second chapter, I apply a novel design, the "parallel encouragement design (PED)" (Imai et al. 2013), to causally test whether emotions act as a mediator between threat and giving up civil liberties in favor of security. In the final chapter, I build on conjoint experiments and introduce an original two-step design to examine how affective polarization influences citizens' willingness to support or give up civil liberty positions. By integrating recent theoretical requirements of politically motivated reasoning (Kahan 2013b, 2015b; Tappin et al. 2020) into the experimental framework, this design offers an

important improvement over standard one-step approaches.

Germany is a well-suited case for studying how political actors shape citizens' attitudes toward civil liberties because it constitutes a very stable liberal-democratic state. It is classified as "Free" with a 95/100 score in Freedom House's 2025 report and 55/60 in the realm of civil liberties, underscoring consolidated rule of law and civil liberties protections (Freedom House 2025). Especially privacy rights and norms are held up by the population and institutions. For example, the importance of privacy rights has been highlighted by the Federal Constitutional Court by striking down expansive data-retention rules in 2010 for disproportionality (Bundesverfassungsgericht 2010). These legal commitments resonate with public values: representative research in Germany reports very high support for individual control over personal information and broad skepticism toward blanket state surveillance (Trepte & Masur 2017). In short, Germany offers a context where privacy-first attitudes are both normatively and institutionally strong. This makes it a hard case to study when and through which political cues citizens can be moved toward security-first preferences.

At the same time, Germany has experienced a diverse set of security shocks that repeatedly make the liberty-security trade-off salient: left-wing terrorism in the 1970s and 1980s (RAF), far-right violence (the NSU murders in 2000-2007 and the 2020 Hanau attack), and Islamist terrorism (the 2016 Berlin Christmas-market truck attack). These episodes produced visible, widely debated counter-measures. The 2015-2016 migration inflow further politicized security and borders, prompting temporary reintroduction of internal Schengen border checks and keeping migration-security high on the agenda (European Comission 2015). During COVID-19, Germany imposed far-reaching restrictions under the federal "emergency brake", which the Constitutional Court largely upheld (Bundesverfassungsgericht 2021). Consequently, debates about civil liberties are not new to the general public, which makes questions about cuts or extensions of civil liberties plausible.

Argument

When attitudes towards civil liberties are broken down into individual policies, similar factors as for general political attitudes should influence citizens' support. Political attitudes are shaped by a multitude of factors, for example salience of an issue (Bordalo et al. 2022; Ciuk & Yost 2016; Weaver 1991) or citizens' socialization (Hatemi et al. 2009; Niemi & Sobieszek 1977; Sapiro 2004; Searing et al. 1976). In the broader literature, scholars emphasize that political attitudes do not arise in a vacuum but are the result of complex interactions between individual predispositions and contextual influences. At the individual level, values and personality traits (Caprara et al. 2006; Gerber et al. 2010; Mondak & Halperin 2008) as well as prior political knowledge (Barabas et al. 2014; Denver & Hands 1990; Gilens 2001; Zaller 1992) condition how citizens process information and form judgments. Socialization through family, peers, education, and media exposure further imprints durable orientations that shape political outlooks over time. At the contextual level, institutional arrangements, elite discourse, and prevailing cultural norms provide interpretive frames that guide how people evaluate political questions. Importantly, attitudes are also contingent on situational dynamics such as perceived threats, political events, and shifts in the public agenda, which can temporarily increase or decrease support for particular positions. Taken together, these perspectives underscore that political attitudes are neither static nor purely individually determined, but emerge at the intersection of enduring predispositions and dynamic political contexts.

I argue that citizens' willingness to give up their support for civil liberties is shaped by two central elements: threat and response. Threat, oftentimes an external shock like a terrorist attack or a pandemic, triggers heightened perceptions of insecurity and the need for protection, which opens the pathway to support political decisions that promise greater safety (Huddy et al. 2005). Such shocks not only create immediate fear but also change the salience of political issues, pushing security concerns to the front of the public agenda. The response, in the form of new policies, is then shaped by policymakers who react to what they perceive as public demand (Caughey & Warshaw 2018). However, this demand is frequently diffuse and inconsistent, often reflecting general concerns rather than concrete

policy preferences. This ambiguity grants policymakers some leeway how they frame and implement new measures, allowing them to strategically interpret public sentiment in line with their political goals, ideological orientations, or institutional constraints (Druckman 2001; Zahariadis 2003). As a result, the interaction between threat and response is not linear but mediated by political leadership, elite discourse, and institutional context, all of which influence how far security-oriented policies intervene with civil liberties.

The broader theoretical argument of this dissertation focuses on the relevance of political actors when studying the support for civil liberties. First, policymakers are able to set the agenda and shape a crisis and its aftermath (Callander & McCarty 2024; Romer & Rosenthal 1978). Second, they have to create the specific policies that cut into civil liberties, which are subsequently evaluated by the public. Third, *who* these policymakers are, to which party they belong, and whether citizens sympathize with them, significantly influences public support for their proposals.

Policymakers enjoy considerable leeway in shaping public attitudes through the way they communicate policies and threats. While external shocks such as a major terrorist attack or the outbreak of a pandemic are often unambiguous in signaling danger to the public, they do not automatically determine how citizens think about the trade-offs between security and liberty. Instead, policymakers frame the meaning of the event and link it to specific policy responses (Amsalem & Zoizner 2022; Chong & Druckman 2007, 2010). They can emphasize the severity and persistence of the threat or, alternatively, downplay its long-term significance, thereby guiding public expectations about what measures are necessary. Emotional appeals play a central role in this process. By invoking fear and anxiety, leaders (with support of the media) can increase public willingness to accept far-reaching restrictions, while appeals to solidarity, resilience, or national unity can help legitimize collective sacrifices (Gadarian 2010). In this way, policymakers' communication strategies influence not whether citizens recognize a threat, but how they understand its implications and what responses they consider justified.

Citizens' reactions to civil liberties restrictions are closely tied to their perceptions of the policymakers who propose and implement them. They do not evaluate potential restrictions in an abstract or purely normative way; rather, their judgments are filtered

through partisan identities, trust in institutions, and perceptions of political leadership (Bullock 2011). Motivated reasoning and partisan cueing play central roles, as individuals tend to interpret political information in ways that confirm their prior attitudes and align with the positions of elites they identify with—even when such policies conflict with their stated principles (Druckman et al. 2013; Slothuus & de Vreese 2010; Taber & Lodge 2006). As a result, the same restriction on rights may be regarded as justified and necessary by supporters of the ruling party or trusted leaders, while opponents may condemn it as illegitimate or authoritarian overreach. Differences in credibility, expertise, and communication style across policymakers further shape these perceptions, highlighting that public attitudes toward civil liberties are less about the objective content of policies and more about the political context and alignment between citizens and elites.

The importance of policymakers when it comes to citizens evaluating their civil liberties policies proposals is further strengthened by the phenomenon of affective polarization (Iyengar et al. 2018). Affective polarization, the animosity towards out-groups, a phenomenon that received a lot of scholarly attention over the last decade, is often brought in context with democratic backsliding. Research has not shown a universal trend across all countries, but an increase in many has been documented (Garzia et al. 2023; Reiljan et al. 2024). A climate of high affective polarization will make it more likely that citizens do not hold politicians accountable when they act against democratic norms, but instead support their in-party candidates (Graham & Svolik 2020).

Summary of the three chapters

This section provides an overview of the three core chapters of the dissertation. Earlier, I outlined how these chapters interrelate and collectively advance the overarching argument of the thesis. Each chapter addresses a distinct aspect of citizens' attitudes toward civil liberties and how they are influenced by political actors. Together they form a coherent analytical framework that links threat perceptions, emotional processes, political alignment, and affective polarization. In the following, I present each chapter in turn, summarizing its specific contribution to the dissertation. For each, I briefly outline its

role within the broader research agenda, the central theoretical argument, the empirical evidence and methodological approach employed, and its implications for understanding public support for civil liberties, both within the scope of this dissertation and in the wider field of political behavior research.

Security vs. civil liberties: How citizens cope with threat, restriction, and ideology

How do citizens balance their preferences for civil liberties and security in the context of a competitive party system? Using the case of terrorism and counter-terrorism, I argue that the willingness to support restrictions of civil liberties does not only depend on external shocks and being targeted by a counter-policy. Instead, it also depends on their ideological match with policymakers and terrorist actors. Using an original survey experiment conducted in Germany in 2022, I study how the four factors feeling threatened by a terrorist attack, being targeted by a surveillance measure, the ideology behind an attack, and the partisanship of counteracting politicians influence the attitudes of citizens and whether these factors are mutually dependent. While earlier research has focused on one kind of terrorism (mostly Islamic), this chapter examines various forms of terrorism (religious, right-wing, and climate-radical) and how they affect peoples' attitudes toward civil liberties and surveillance. The results show that terrorist ideology plays a minor role, but that it matters whether citizens sympathize with the party that proposes a policy. The study extends our understanding of the political consequences of polarization, threat perceptions of terrorism, and public support for surveillance policies.

This chapter contributes to the general argument by highlighting the importance of actors on both sides of the civil liberties-security trade-off: the actors who generate threats and the policymakers who propose responses. It establishes a two-by-two dimensional framework: first, whether citizens are directly affected by the threat or by the countermeasure; and second, whether citizens' ideological positions align with the perpetrators of violence and/or the policymakers introducing restrictions. By systematically examining these dimensions, the chapter demonstrates that attitudes toward civil liberties cannot be understood solely as reactions to external shocks or objective security concerns, but

are deeply intertwined with citizens' political identities and evaluations of elites. The empirical finding that partisanship of policymakers exerts a particularly strong influence on citizens' willingness to support restrictions provides crucial support for the overarching argument of this dissertation. In doing so, the chapter lays the conceptual foundation for the subsequent analyses: it introduces the role of partisan alignment that is taken up more explicitly in the third chapter. Is is also pointing to the potential role of emotional dynamics in how threats are communicated, which is further developed in the second chapter. At the same time, the limitations of this chapter—its focus on a single national context and a restricted set of ideological configurations—underline the need for comparative and more differentiated analyses, which the later chapters provide. In this way, the first chapter serves as the entry point into the dissertation's broader contribution: demonstrating how citizens' support for civil liberties is shaped not only by the presence of threats but also by the political actors who frame, communicate, and respond to them.

Do emotions mediate the impact of threat on individuals' policy preferences?
Evidence from a parallel encouragement experiment.

Coauthored with Sandra N. Morgenstern

How a politician communicates a threat influences individuals' policy preferences, especially concerning the trade-off between security and freedom. Recent theories in political psychology suggest that emotions play a crucial role in this context, acting as a mediator between threat and the public's policy preferences. Analyzing this relationship requires mediation analysis. However, existing mediation models face significant limitations in terms of causal interpretation. We address this issue using a novel experimental approach for our mediation analysis, parallel encouragement design (PED), which allows us to manipulate not only the treatment but also the mediator. Specifically, we induce different emotional responses (anxiety and anger) to examine their effects on the outcome variable. Our results do not support the expected mediation effect of emotions on the relationship between threat communication and policy preferences: Neither does anxiety-

inducing threat communication lead individuals to increased support for security, nor does anger-inducing threat communication lead to increased support for freedom. Based on a comprehensive data collection with multiple pre- and robustness tests, we compare the results of our model using the PED with the results of alternative mediation approaches and reflect on the implications for the literature. We conclude by raising new questions about emotions in political science research.

As outlined in the general argument, policymakers possess some leeway when translating citizens' threat-induced demand for more security into concrete policies. Much of the literature has emphasized the role of emotions in this process, e.g., Huddy et al. (2005), suggesting that elites can strategically evoke anxiety or anger to steer citizens toward either greater acceptance of security measures or stronger defense of civil liberties. This chapter challenges this assumption by showing that the public is less easily swayed by such emotional cues than many theories suggest. Accordingly, it highlights important limits to the influence of political actors: while policymakers can shape the framing of threats and propose responses, they cannot simply manufacture emotional reactions to secure the public's support. The contribution of this chapter, therefore, lies in refining our understanding of elite influence, showing that the capacity of actors to manipulate attitudes through emotional appeals is more constrained than often assumed. At the same time, this opens the door to exploring other mechanisms of influence, such as partisan alignment, where citizens' evaluations of restrictions depend less on emotional triggers and more on whether the proposing actors belong to political camps they trust and identify with.

Support for Civil Liberties under Affective Polarization

While citizens' support for civil liberties in general has always been high, more detailed research on these attitudes has revealed that this support is not universal. In this chapter, I investigate the relationship between citizens' preferences for specific polices of civil liberties and the supply side of such proposals, namely political candidates and their respective parties. I combine the concept of affective polarization with the theory of politically motivated reasoning to argue that stronger affective polarization increases the probability that citizens give up their policy position on civil liberties. I conducted an original two-step

survey experiment in nine European countries with a total of N=11,894. Results from the first step of the experiment show that citizens have a strong preference for candidates that hold liberal positions of civil liberties. In the second step, party-affiliations of hypothetical candidates are revealed. The results of the second step reveal that citizens who are strongly polarized for the shown party dyad are 35 percentage points more likely than weakly polarized citizens to withdraw their vote for an out-party candidate who holds preferred policy positions. However, even strongly polarized citizens still indicate that these out-party candidates should be allowed to work with other politicians and should be allowed to speak in public about these issues. The chapter advances our understanding of citizens' support for civil liberties and the effect of affective polarization on these rights in different party-systems.

This chapter offers a more detailed examination of how policymakers influence citizens' attitudes towards civil liberties, building on the discussion introduced in the first chapter. In this respect, the chapter goes beyond the earlier focus on single party cues by incorporating alternative policy options advanced by different actors. This broader perspective allows for a more comprehensive understanding of how citizens evaluate civil liberties policies when faced with competing partisan sources. The chapter contributes to the general argument by showing that policymaker partisanship is not simply an additional factor, but a central lens through which citizens interpret and judge restrictions of civil liberties. Drawing on the concepts of affective polarization and politically motivated reasoning, it demonstrates that partisan alignment can outweigh substantive policy preferences, leading citizens to abandon support for their own preferred civil liberties positions when these are proposed by out-party actors. At the same time, the findings underline that partisan hostility does not translate into a wholesale rejection of democratic principles. Even strongly polarized citizens remain willing to endorse rights such as free speech for out-party candidates. This duality refines the broader argument of the dissertation by highlighting both the constraining effects of polarization on substantive policy support and the resilience of democratic norms in the realm of civil liberties.

Summary & Discussion

Jointly, the three dissertation chapters provide evidence that citizens' support for civil liberties is shaped by political actors. The first chapter demonstrates that willingness to accept restrictions on civil liberties in the face of terrorism is influenced less by the ideology of the perpetrators, but more by whether citizens share partisan alignment with the policymakers proposing countermeasures. The second chapter tests the theorized mediating role of emotions in the relationship between threat communication and policy preferences, finding that neither anxiety nor anger meaningfully shifts support for security over freedom. The third chapter shows that affective polarization can override prior policy preferences, with strongly polarized citizens being much more likely to abandon their support for civil liberties when those positions are endorsed by political out-groups. Together, these findings highlight both the conditional resilience of civil liberties and the contexts in which political and psychological factors erode their support.

This dissertation is subject to the following limitations. First, the examined support for civil liberties policies covered only a subset of civil liberties, mainly focusing on privacy rights and surveillance. In the third chapter, this is already addressed by tapping into further policies, investigating attitudes towards the freedom of the media (and obligatory civil service). Second, the analyses focus on political attitudes rather than actual behavior. While attitudes are important indicators of democratic support, they do not always translate into concrete political actions, such as voting, protesting, or complying with restrictive measures. Third, the reliance on experimental evidence presents the well-known challenge of external validity. Even carefully designed experiments can only approximate real-world dynamics, and it remains uncertain whether the observed responses in survey settings fully capture how citizens would react in moments of acute crisis. Lastly, the generalizability of the findings is constrained by the geographic scope of the data. The first two studies draw exclusively on evidence from Germany, which may limit broader inferences given the country's specific political and historical context. However, this limitation is partly addressed by the third study, which expands the analysis to multiple European countries and thus allows for a comparative perspective across different political environ-

ments.

Contribution & Implications

This dissertation makes multiple contributions: empirical, theoretical and societal. Empirically, first, examining specific civil liberties policies revealed that citizens' support for civil liberties is fragile. Especially affective polarization proposes a relevant danger for civil liberties as citizens couple their support for related policies to the proposing party. This finding contributes to the democratic backsliding literature which investigates citizens' support for anti-liberal views and whether citizens hold politicians accountable for positing those views (Broockman et al. 2022; Gidron et al. 2025). This dissertation goes beyond existing studies (Carey et al. 2020; Graham & Svolik 2020) by showing that citizens are even willing to take back their previously stated positions, once they learn which parties' position aligns with their policy preferences. Second, when confronted with the decision to give up civil liberties, the process seems to be rather calculated than out of a spontaneous reaction or a emotional response. While emotions could foster citizens' willingness to seek for information and engage with politics (Groenendyk 2011; Valentino et al. 2008), based on the here presented findings citizens' support for civil liberties are not influenced by these emotions. Third, I have shown that hypothetical personal threats do not have a stronger influence on citizens support for security over civil liberties than societal threat. The evidence of empirical studies showing variation in different types of threat (or no threat) has been mixed: some studies reporting no effect (Antoine 2023; Helbling et al. 2022), some studies finding an effect (Ziller & Helbling 2021), and others finding an effect for some treatment dimensions (Trüdinger & Ziller 2022). This dissertation adds to the discussion, providing insight into a new dimension of threat for civil liberties, through ideological biases and influence through politicians.

The broader theoretical contribution constitutes the relevance of political actors when studying the support for civil liberties. When asking citizens about their attitudes towards policies, the policymakers who have to create these policies are often neglected. While the theory of political motivated reasoning has established the importance of ideology and

party cues (Bisgaard & Slothuus 2018; Epley & Gilovich 2016; Kunda 1990; Taber & Lodge 2006), it is still not consequently considered in studies about policy preferences. In the first and especially the third chapter, the importance of the policymakers and their ideology in shaping citizens' attitudes has been examined in detail. The results have shown that depending on *who* is proposing a policy can add another trade-off dimension for individual citizens when evaluating civil liberties policies. Not only the content of the policy is relevant for citizens' evaluations, but also who proposes it.

Lastly, this dissertation provides insights for society when and under which circumstances civil liberties are in danger. The positive news is that citizens do not seem to give up civil liberties at the first chance due to emotional reactions. Instead, decisions to prioritize other values more strongly, for example in times of crisis or threat, seem more carefully considered. However, the negative news is that the support for civil liberties is fragile. Especially affective polarization drives citizens to let go their preferred civil liberties policies. They are more willing to support backsliding processes, when principles such as civil liberties are "eroded gradually, one at a time" (Ferrer et al. 2025). The importance of civil liberties for individual citizens as well as democracies as a whole cannot be emphasized enough with trends of democratic backsliding in many Western states (Bermeo 2016; Waldner & Lust 2018). Citizens should be reminded that it is worth to fight for civil liberties and to carefully consider under which circumstances they want to support (temporal) restrictions in order to strengthen other values.

The most important implication of this dissertation concerns policymakers. Their role in shaping public attitudes toward civil liberties cannot be overstated. Given the fundamental importance of civil liberties to democratic governance, policies that interfere with them should not be enacted lightly. Especially main-stream politicians can impact how citizens view democratic norms (Valentim et al. 2025). Even minor or temporary restrictions can leave lasting impressions on how citizens perceive the legitimacy of democratic institutions. Decisions made during times of crisis, whether related to national security, public health, or social unrest, can therefore have enduring consequences for democratic resilience. My findings underscore the need for transparent communication and clear justification of policy decisions. Finally, policymakers must regard civil liberties not merely

as legal safeguards, but as core components of democratic culture that require continuous protection. Defending them is not only a matter of commitment to the constitution, but also of maintaining public trust in the democratic system itself.

Chapter 1

Security vs. civil liberties: How citizens cope with threat, restriction and ideology

Abstract

How do citizens balance their preferences for civil liberties and security in the context of a competitive party system? Using the case of terrorism and counter-terrorism, I argue that the willingness to support restrictions of civil liberties does not only depend on external shocks and being targeted by a counter-policy. Instead, it also depends on their ideological match with policymakers and terrorist actors. Using an original survey experiment conducted in Germany in 2022, I study how the four factors feeling threatened by a terrorist attack, being targeted by a surveillance measure, the ideology behind an attack, and the partisanship of counteracting politicians influence the attitudes of citizens and whether these factors are mutually dependent. While earlier research has focused on one kind of terrorism (mostly Islamic), this chapter examines various forms of terrorism (religious, right-wing and climate-radical) and how they affect peoples' attitudes toward civil liberties and surveillance. The results show that terrorist ideology plays a minor role, but that it matters whether citizens sympathize with the party that proposes a policy. The study extends our understanding of the political consequences of polarization, threat perceptions of terrorism, and public support for surveillance policies.

Keywords: Security, Civil Liberties, Terrorism, Ideology, Polarization, Policy preferences, Surveillance, Survey experiment

This article was originally published as: Jäger, Felix (2023): Security vs. civil liberties: How citizens cope with threat, restriction, and ideology. Frontiers in Political Science 4:1006711. https://doi.org/10.3389/fpos.2022.1006711

1.1 Introduction

In times of crisis, civil liberties often have to be restricted for a higher good. Since civil liberties are one of the great accomplishments of democracy, this is not an easy decision for governments to make or for citizens to support. When citizens are asked how important democratic values such as civil liberties are to them, they rate them very high (Sullivan & Hendriks 2009). However, these rights are not set in stone and cannot be considered in a vacuum (Graham & Svolik 2020; Jenkins-Smith & Herron 2009; Peffley et al. 2001), as they entail trade-offs with other, highly valuable rights. One of the strongest conflicts is that between security and civil liberties. This applies to different external shocks, such as a pandemic, war, or terrorism (MacKuen & Brown 1987; Rohde & Rohde 2011).

Policymakers react to these external shocks by implementing policies to protect the population from such dangers. These policies are a materialization of the norm conflict between civil liberties and security. However, these policies are often heavily debated both within parliaments and among the general public. In these discussions, not only the content of the policies matters, but also the the ideology of the parties who are proposing them.

In this chapter I argue that the willingness to support restrictions of civil liberties depends not only on external shocks, but also depends on whether citizens are inclined or averse to policymakers. The acceptance of opinions from other people or actors who have an opposing ideology or partisanship is limited within a competitive party system or a polarized society. Polarization along party lines is no new phenomenon, but the level of polarization has increased over the last two decades (Druckman et al. 2021; Heltzel & Laurin 2020). In Germany, where this study is conducted, affective polarization has been slowly increasing since 2008 (Harteveld & Wagner 2023). A major driver of polarization has been the far-right party *Alternative für Deutschland* (Alternative for Germany, short AfD) since its foundation in 2013 (Siri 2018). Affective polarization in Germany is mainly between partisans of the AfD and other partisans. This disliking is asymmetrical, with a higher aversion of supporters from other parties toward the AfD. AfD supporters, in contrast, are less negative toward other partisans (Jungkunz 2021).

Consequences of polarization along partisanship can be seen, for example, in studies about democratic backsliding (Somer & McCoy 2018; Svolik 2019). The results concerning citizens' propensity to favor partisanship over democratic norms are mixed. Carey et al. (2020) find that citizens are defending democratic norms even when this requires a punishment of a candidate from the own camp. Other studies find opposing results, according to which partisanship is valued more highly than democratic norms (Graham & Svolik 2020; Kawecki 2022; Saikkonen & Christensen 2022). The polarization along partisanship embeds the norm conflict of civil liberties and security in a societal context. This constitutes the first research gap this chapter is addressing. The chapter is guided by the question: How do citizens balance their preferences for civil liberties and security in the context of a competitive party system?

A case in which the necessity occurs to find a balance between civil liberties and security is terrorism and counter-terrorism as a reaction to it. Looking at specific cases is necessary, as they add additional elements and variables for citizens to consider. In the case of terrorism, the major explaining factor is perceived threat. In general, the higher the perceived threat, the higher the support for security even at the expense of civil liberties (Haider-Markel et al. 2006; Huddy, Feldman, & Weber 2007; Huddy et al. 2005). A second element is the ideology or motivation of terrorists (Caton & Mullinix 2023). Not every motivation generates the fear or perceived threat of becoming a target in every citizen equally. A white person might feel less threatened by right-wing terrorism than a non-white person, so as an ordinary citizen might feel less threatened by left-wing terrorism than a person in a leading position. Turning this relationship around, the motivation of terrorists could even lead citizens to support them. However, most studies focus on a single type of terrorism, which has been mainly Islamist terrorism in the last two decades. Despite right-wing terrorism being responsible for many attacks in western democracies, especially in Germany and the U.S.[1], only few articles have so far looked at different kinds of terrorism (Pronin et al. 2006; Wynter 2017). This study addresses this second research gap by comparing how different terrorist motivations (Islamist, right-wing and climate-radical) influence citizens' preferences for security.

[1] https://www.csis.org/analysis/escalating-terrorism-problem-united-states

To answer the research question, the four stated elements (feeling threatened by a terrorist attack, being targeted by a surveillance measure, the ideology behind an attack, and the partisanship of counteracting politicians) are considered. Using a survey experiment allows me to vary these elements through specific treatments and to compare citizens' policy preferences under these conditions. Such a design complements natural experiments (Bozzoli & Müller 2011; Giani et al. 2021), which are limited to actual attacks and cannot exclude external circumstances. The perception of actual terrorist attacks can be influenced by other simultaneous events, such as election campaigns (Muñoz et al. 2020). These limitations can be overcome by the survey experiment employed here. The design has the practical advantage that, for example, the influence of different terrorist motivations on citizens' attitudes can be examined, which would not be possible in the real world. The survey experiment was pre-registered and conducted in Germany in 2022.

The results show that, first, citizens value their privacy and prefer targeted measures. Second, partisanship matters even in a crisis. Citizens are willing to accept cuts in civil liberties when they are proposed by their preferred party. When these cuts are proposed by a disliked party, the support decreases strongly. This logic does not apply to terrorist motivation. Citizens do not change their support for civil liberties when terrorist attacks are motivated by an extreme form of an ideology the citizens adhere to. This result holds for citizens with a high level of extremism and citizens with a high propensity to violence.

The study expands previous findings by looking at the conflict of civil liberties and security through the lens of partisanship and ideology. In times of crisis, when difficult decisions must be made, parties should work together to gain support from the population. The good news for societies is that the political affiliation of citizens does not extend to support for ideologically close terrorist attacks.

Increasing our knowledge about citizens' preferences for security and civil liberties is crucial for western democracies. While security has been treated as a higher good by politicians in recent years (Hegemann & Kahl 2018), the attitudes of citizens should not be ignored. Undermining civil liberties extensively can lead to undesirable developments. A restriction of fundamental freedom can be the beginning of democratic backsliding. While this is not a fast, overnight process, it can open paths that turn away from democracy or

facilitate ongoing processes. A better understanding of the circumstances or reasons why citizens support restrictions of civil liberties opens up the possibility of counteracting such movements or seeking other solutions to strengthen democracy where it is needed.

1.2 Literature and Arguments

Threat and surveillance—the trade-off between security and civil liberties

One aspect of citizens' decision to support a policy is the calculation of whether the policy improves their situation or not. It comes down to the personal situation of citizens. In the context of civil liberties and security, citizens have to ask themselves whether the policy is increasing security more than civil liberties are restricted. This has to be balanced against the incoming threat, which should be prevented by the policy. The relationship can be applied to any debate about civil liberties vs. security, for example health protection issues during a pandemic or the prevention of terrorism.

Table 1.1: Four combinations of ordinary citizens who experience an external shock and are targeted by a counter-policy.

		External shock	
		Personal threat	No personal threat
Counter-policy	Not being targeted	A	B
	Being targeted	C	D

Table 1.1 shows the stated matrix between an external shock and the counter-policy. Using the specific case of terrorist threat and counter-terrorism policies, I explain in the following how these two factors are expected to influence citizens' preference for security and civil liberties.

Threat is arguably the strongest predictor and best-examined factor in studies about citizens' preferences in the context of terrorism. A large body of literature on support for security policies exists that examines the predicting effect of perceived threat exclusively or among other factors (Asbrock & Fritsche 2013; Breznau 2021; Cohen-Louck 2019;

Davis & Silver 2004; Hetherington & Suhay 2011; Huddy et al. 2002, 2005). Unfortunately, the nomenclature is not consistent across studies (Feldman 2013: p. 55). Threat, perceived threat, or the perception of risk describe the same issue from a slightly different angle, but these terms are often used interchangeably. In this study, I define perceived threat as an outcome of an external shock, event, or situation the individual citizen is confronted with and which is interpreted or perceived as negative or dangerous. This definition focuses on perceived personal threat and not on societal, sociotropic, or national threat.

Perceived personal threat directly concerns individuals confronted with the external shock. In such a situation, individuals "will probably be made particularly aware of their own vulnerability" (Trüdinger 2019: p. 37). This awareness of becoming a victim leads people to think more about their in-group than about themselves as individuals (Asbrock & Fritsche 2013). This awareness and the wish for protection for oneself and the own in-group translates to policy preferences for security. In the case of terrorism, it seems very likely that personally threatened citizens will favor security over civil liberties (Hetherington & Suhay 2011).

These external shocks (or, more specific, terrorist attacks), which are a personal threat for individuals, have to be separated from a general or omnipresent fear of terrorist attacks. A general fear of external shocks is an individual predisposition, which describes citizens' general sensitivity to threat or baseline threat (Marcus et al. 1995: p. 107). An individual who has a higher baseline threat is expected to have a higher preference for security in general. For example, more fearful individuals are more in favor of restrictive migration policies (Helbling et al. 2022).

The individual shocks provide a "contemporary information" (Marcus et al. 1995: p. 107), which provokes the perception of threat. As Trüdinger (2019: p. 35) put it, "[T]he consequences of perceived threat can be considerable as it might result in a complete change in political reasoning". In danger of an external shock, "people try to restore perceptions of global control over their environment, which are at stake in times of threat" (Fritsche et al. 2011: p. 102). This regain of control is expressed as an increased preference for security measures.

H1a: Citizens' support for counter-terrorism measures increases when they are personally threatened by terrorist attacks.

The rows in Table 1.1 show the counter-policy. The rationale behind the influence of this dimension on citizens' policy support is similar to the influence of the external shock. As in the external shock dimension, citizen can also be target of the counter-policy or not. The possibility of this differentiation depends on the individual measure because not all counter-policies to external shocks concern the ordinary citizen.

The term counter-terrorism covers a lot of different policies, ranging from military actions abroad (Gadarian 2010) to immigration regulations (Helbling & Meierrieks 2020) and domestic measures such as surveillance (van Leeuwen 2003; Ziller & Helbling 2021). In this chapter, I operationalize counter-terrorism as a surveillance policy. Surveillance can target suspicious individuals or groups, which would not concern ordinary citizens. Such a measure is rather easy for citizens to support, since it does not impose any restrictions on them. This is similar to other measures, for example a policy aiming to disrupt financial flows of terrorists. These measures do not affect ordinary citizens and thus come at no personal cost.

In contrast, dragnet surveillance affects every citizen in the state, so citizens are indirectly targeted. In this case, the measure entails the conflict between security and civil liberties (Kossowska et al. 2011). Security should be increased by preventing terrorist acts. Civil liberties are restricted, as surveillance can severely curtail privacy rights (Ziller & Helbling 2021). Surveillance falls in the category of privacy laws and directly affects citizens in contrast to measures that concern procedural or immigration laws (Epifanio 2011). Since citizens are expected to value their privacy, dragnet measures should receive less support than measures targeting suspect individuals.

H1b: Citizens' support for counter-terrorism measures decreases when they are targeted by the counter-terrorism policy.

The expectations stated in H1a and H1b are rather straightforward: respondents to whom case A in Table 1.1 applies should be most supportive of a security measure, respondents in case D the least supportive. Case C is the most interesting case, as citizens are confronted with the dilemma of threat and restriction of civil liberties. Depending on

the measures implemented by the government, the individual liberties are curtailed (Davis & Silver 2004). The theoretical argument in the literature on perceived threat highlights the strength of the influence that perceived threat has on individuals' attitudes. Following this line of research, I argue that respondents strongly support security measures even at the cost of their personal liberties.

H1c: The feeling of being threatened by a terrorist attack outweighs the feeling of being targeted by a policy and drives the support for a counter-terrorism measure.

How ideology and partisanship influence citizens' willingness to favor security over civil liberties

While the need to balance these two factors is very clear, the support for policies has to be examined in the context of a society in which citizens have different ideological stances. The necessity to do so becomes clear by going back to Table 1.1. Both sides of the table can be extended by an ideological dimension. Threat when caused by some human actor has an ideological background. Equally, the counter-policy must be suggested by a party or implemented by a government, which also has an ideological background. Since ideology is a guideline for individuals to evaluate specific situations or policies, it also influences citizens preferences. Ideology can be described as an "interrelated set of attitudes, values, and beliefs with cognitive, affective, and motivational properties" (Jost et al. 2009: p. 315). Ideology groups peoples' attitudes and experiences so they can be used as guidelines for future decisions.

Ideology as a factor in policy preferences has been examined for a long time (Stimson 1975). First, the specific content of policies can be more appealing to citizens with a certain ideology. Second, a policy is proposed by a party, which can be used as additional guidance by citizens. Research has shown that partisans are more likely to support policies when they are proposed by in-group partisan elites rather than out-group partisan elites (Bolsen et al. 2014; Pink et al. 2021). Intolerance exists on both sides of the ideological spectrum toward the other side: "conservatism would predict intolerance of left-wing targets, liberalism would predict intolerance of right-wing targets. Moreover [...] those on both the left and right would be biased against ideologically opposing targets relative

to ideologically supporting targets" (Crawford & Pilanski 2014: p. 842). While partisanship is not exactly the same as ideology, the two concepts are highly related and correlated (Barber & Pope 2019; Lupton et al. 2020; Wright et al. 1985). In this chapter, I will mainly refer to partisanship as an outcome of ideology. Partisanship is heavily used by citizens to identify with politicians and take their position on issues under discussion.

Policies concerning the nexus between security and civil liberties are no exception when it comes to the impact of citizens' partisanship on their policy preferences. As these policies are suggested by politicians, the match or mismatch between citizens' ideology and that of these politicians should be a strong indicator of whether a citizen supports the policy. On average, when the policy-proposing party is known by citizens the support for the policy decreases because there are always citizens who dislike a given party. In contrast, when the citizens are inclined to the policy-proposing party, the support for the policy should increase.

H2a: Citizens' support for counter-terrorism measures decreases when the policy-proposing party is disliked by them.

H2b: Citizens' support for counter-terrorism measures increases when they are inclined to the policy-proposing party.

Ideology is also inherent in the specific context I am investigating—terrorism. Conveying an ideologically motivated message is essential in many definitions of terrorism (Ruby 2002; Schmid 2011). While civil liberties have been widely studied in the context of terrorism, terrorism has mostly been considered as a general concept with no further specification. This introduces another factor in citizens' support for counter-terrorism policies, which is the possible alignment of perpetrators' motivation or ideology and the one of citizens (Caton & Mullinix 2023). Ideology can serve as a guiding factor, which allows citizens to allocate themselves to groups, such as parties or interest groups. In an extreme case, citizens could sympathize with potential terrorists and their motivations.

While most citizens are likely to condemn any type of terrorism, supporters of extreme ideologies might not oppose such acts as strongly as others. In a polarized society, citizens can be expected to support extreme versions of their own ideology. While most people will still not directly support terrorism, they might not support security measures that aim

to prevent such incidents as strongly as other citizens.

H2c: Citizens' support for counter-terrorism measures decreases when they share the ideology of the terrorist actors.

The previous hypothesis concerned the influence of partisanship and ideology on citizens' attitudes toward counter-terrorism measures. As outlined, the effect is expected to be very strong and persistent. However, partisan loyalty will not be unlimited. When citizens deviate from the lines of parties they support is still debated. Related to this is the question of what factors influence the formation of citizens' policy preferences. Can the dominant factor of party cues (G. L. Cohen 2003) be overruled by other factors?

A likely case of deviation from the party lines is when politicians behave undemocratically or propose policies that contradict democratic norms. Studies conducted in the U.S., however, have yielded contradictory findings. Graham & Svolik (2020) find that in the U.S., partisanship is more important to citizens than democratic norms: they would rather stick to their ideologically close candidate who violates democratic norms than vote for the opposition. Saikkonen and Christensen (2022) report similar findings for Finland. Carey et al. (2020) come to the opposing conclusion that citizens are willing to punish undemocratic behavior regardless of partisanship. While the violation of democratic norms is an extreme case, it can generally be expected that citizens rather take the position of their preferred party.

A most likely case of deviation from the party lines occurs when the fundamentals of human life are in danger or threatened. Security and the need for physical integrity is at the very bottom of human necessities (Maslow 1954). Since perceived threat has been identified as a strong predictor for citizens need for security, perceived threat should outweigh effects of partisanship. I expect citizens to support a security policy even if they dislike the policy-proposing party.

H3a: Citizens' support for counter-terrorism measures increases when they are personally threatened by an attack, even when they dislike the policy-proposing party.

Another trade-off or contradiction can appear between party preference and the suggested counter-terrorism policy. Citizens could sympathize with a party, but dislike their suggested policy. More specifically, citizens could disagree with the policy-target, espe-

cially if the target is their own in-group. In this case, citizens are more likely to oppose a policy because they are constrained by the policy. When polices are targeted toward an in-group, partisanship should be overruled by the attitudes toward the content of the policy (Nicholson 2012). Therefore, I expect that support for a dragnet policy is slightly less likely than support for a targeted or not specified policy. However, the level of citizens' support should still be comparatively high when the suggested policy is proposed by their preferred party.

H3b: Citizens' support for counter-terrorism measures decreases when they are the target of that policy, even when they are inclined to the policy-proposing party.

1.3 Data & Method

Sample. I analyze data from a pre-registered[2] survey experiment conducted in Germany in June 2022. The sample matches the general population in terms of age, gender, and education (N = 2,045).[3] No sampling weights were applied, since highly qualitative survey data is giving precise estimates while preserving high statistical power (Miratrix et al. 2018). The experiment was part of a larger survey; the median response time was 20.02 minutes. At the beginning of the survey, an attention check was included; participants who failed the attention check were excluded from further participation in the survey and no answers were collected from them (91.73 percent of the respondents passed the attention check).

Experimental setup. The study uses a 4x3x3x3 full factorial between-subjects design (Auspurg & Hinz 2015) resulting in 108 unique vignettes in total, of which every respondent randomly received one. In a short text (Sauer et al. 2020), respondents were asked to

[2]Pre-registration plan on osf: https://osf.io/7rs5v. Note that the wording of hypothesis H1 and H3a has been changed from "targeted" to "personally threatened" to make the wording consistent throughout the study. In H2b, H3a and H3b, "ideology" has been replaced with "inclined/disinclined" to match the wording in the hypothesis with the design of the experiment. The wording of H3b has been rearranged to match the wording of H3a.

[3]The study was conducted by the survey company Bilendi & respondi. The distribution of demographic variables in the sample can be found in the Appendix subsection A.3.1.

imagine a terrorist attack. The following paragraph shows an example of a vignette with manipulated dimensions highlighted in *italics*:

> Imagine that a terrorist attack conducted by *a right-wing group* takes place. An explosion occurs, injuring several people. *There is a serious danger for citizens like you, your family and friends*.
>
> To ensure that attacks like this are prevented in the future, politicians from *The Greens* want to increase surveillance measures. *These measures shall target every citizen in the country*. The measure includes the monitoring of telephone calls, letter mail, e-mails and social media accounts, as well as chats on cell phones or smartphones.

Details of this attack are described using the four treatment dimensions. Two dimensions each describe the terrorist attack and the counter-terrorism measure. The first dimension describes the motivation of the perpetrator as Islamist, right-wing radical, or climate-radical. Islamist terrorism became very prominent through the attacks of 9/11. Since it is well known and investigated very broadly, I included this attribute to contextualize the other two motivations: right-wing and climate-radical. Right-wing terrorism is a common source of terrorism and has been present for over a decade in western democracies. Especially in Germany, where the study was fielded, right-wing motivated terrorism is the predominant form and responsible for the largest attacks.[4] The third attribute is climate-radical terrorism, often also called ecoterrorism. Even though this type of terrorism is less well known as attacks with a different background, I argue that it is the most promising motivation to test my hypothesis for several reasons: First, it is not completely unknown, since ecoterrorism as a term has appeared in mainstream media in the last two decades, for

[4]Recent examples are the shooting in Hanau in 2020 (`https://www.nytimes.com/2020/02/20/world/europe/germany-hanau-shisha-bar-shooting.html`, accessed 15.07.2022) and the anti-semitic attack in Halle in 2019 (`https://www.theguardian.com/world/2019/oct/09/two-people-killed-in-shooting-in-german-city-of-halle`, accessed 15.07.2022). In the early 2000s, a series of attacks was conducted by the Nationalist Social Underground (NSU). Reports in the media lasted for several years due to a long trial (`https://www.nytimes.com/2013/05/07/world/europe/trial-of-neo-nazi-beate-zschape-in-germany.html`, accessed 15.07.2022).

example in the U.S. (R. K. Smith 2008). Some attacks of radical environmentalist have been classified as terrorist attacks (Hirsch-Hoefler & Mudde 2014).[5] Second, environmental protection and its implication to slow down climate change are very salient in the public discourse. In Germany, it was one of the major issues during the last national election campaign in 2021. Many people have a strong opinion on the issue. It is not too hard to imagine that somebody with extreme attitudes toward climate protection will turn to terrorism at some point to underline their message with violence. There are already books with activist intent that discuss the use of violence to highlight the importance of mitigating climate change, e.g., Malm 2021. Third, this setup of right-wing and climate-radical motivation mirrors the setup of the third treatment dimension, the party that proposes the counter-terrorism policy. For this dimension, I use the *Alternative für Deutschland* (AfD) and the *Bündnis 90/Die Grünen* (The Greens). While the AfD is classified as the furthest to the right of the major parties in Germany, The Greens take strongly opposing positions to the AfD on many policy issues. Therefore, the parties are very distinguishable and appeal to different people.[6]

The second treatment dimension describes whether someone is personally threatened by a terrorist attack (or not). The fourth dimension describes whether someone is targeted by a counter-terrorism policy (or not). Every dimension also contains a control group, in which the attribute was not specified or mentioned.[7]

Measures. The treatment text concludes with a description of a security policy involving the surveillance of telephone calls, letters, e-mails, social media accounts, and chats on cell phones or smartphones. Afterwards, the respondents were asked to state to

[5]For a historical overview see Loadenthal (2017). An exemplary group is the Earth Liberation Front (ELF), who for example attacked private property in the U.S. in 2008 (`https://web.archive.org/web/20080306184703/http://ap.google.com/article/ALeqM5hQlKz_UjBgvhm8rfGiTaQYS82a5gD8V66KUG0`, accessed 28.09.2022) and a cableway in Germany in 2013 (`https://web.archive.org/web/20130905085530/http://www.ndr.de/regional/niedersachsen/harz/seilbahn167.html`, accessed 28.09.2022).

[6]The alternative would have been to use left-wing terrorism as opposed to right-wing terrorism. However, left-wing terrorism has not been present in the past two decades. Also, the political party in Germany furthest to the left is quite unpopular, with a voter turnout of 5%.

[7]See Appendix A.1.1 for an overview of the dimensions and attributes and detailed vignette wording.

which degree they would support the surveillance policy on a ten-point scale. This serves as main dependent variable for the study. As stated earlier, surveillance entails the conflict between security and privacy rights and can restrict ordinary citizens. The case of surveillance is also well suited to examine the hypothesis about partisanship, since the "cuts into privacy rights beyond what voters accept should reduce political support for the incumbent" (Epifanio 2011: p. 403). Therefore, differently than in the case of other counter-terrorism measures, the preferences for surveillance really become a balancing act between security and civil liberties.

To identify respondents' partisanship, I use a pre-treatment measure that asks respondents to rate their level of liking or support for each party on a scale from one ("strong aversion") to 10 ("strong inclination"). The three lowest categories are coded as aversion, the three highest as inclination and the remaining four as neutral.[8]

Analysis. To test the impact of the single dimensions, I compare average marginal component effects (AMCEs; Hainmueller et al. 2014).[9] To study the interdependence of the dimensions, e.g., terrorist threat and being target of a policy, I use the framework by Egami and Imai (2019).

1.4 Results

Main results. Figure 1.1 shows the AMCEs for the four treatment dimensions. The first two dimensions concern the side of the terrorists. For the first dimension, terrorist threat, the effect does not differ between the control group and the treatment group. The additional information in the hypothetical scenario that respondents are in danger or not does not influence their support for the surveillance policy. The second dimension, the specification of the motivation of terrorists, also has no influence on respondents' support for the counter-terrorism measure.

[8] In robustness analyses, I vary the thresholds for categorizing respondents as inclined or disinclined to a party. For further validation, a secondary item is used, which asks respondents for their vote choice if a general election were held next Sunday (*Sonntagsfrage*).

[9] I also present marginal means in the Appendix to avoid the problem of having a fixed reference category (Leeper et al. 2020).

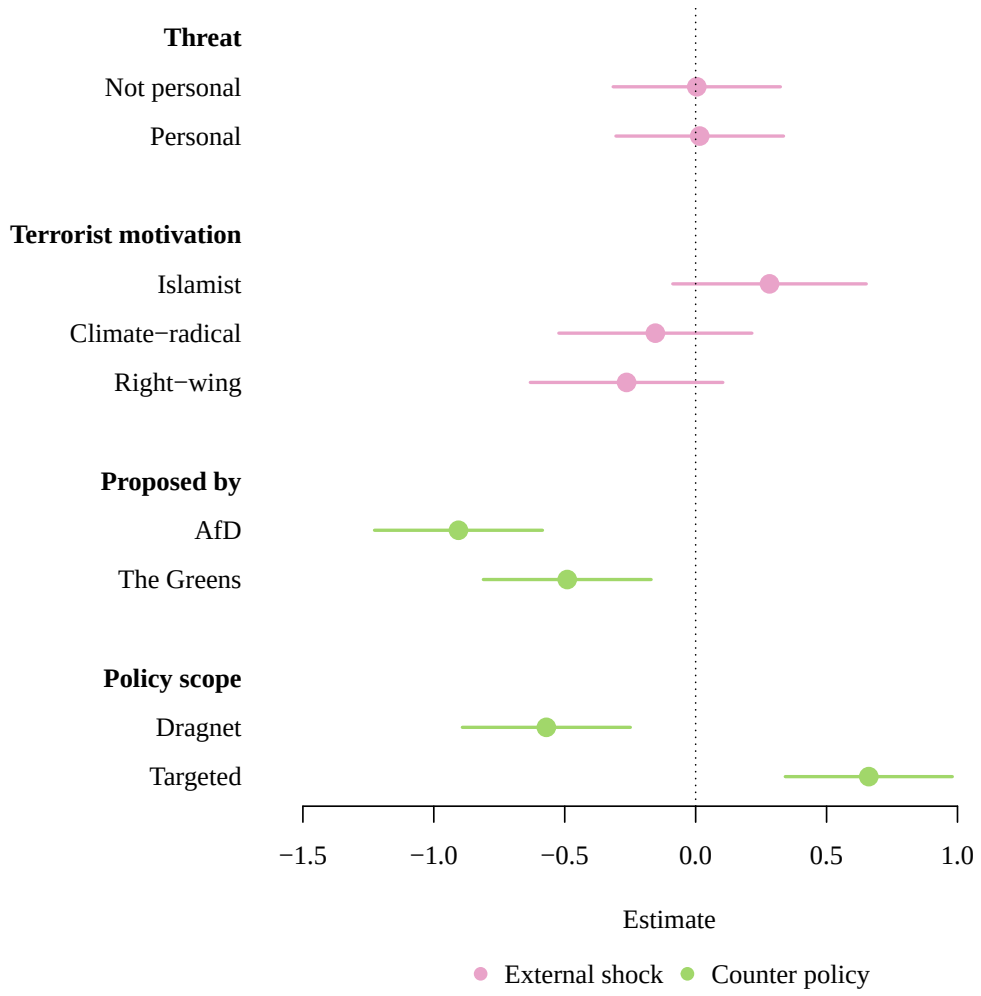


Figure 1.1: Average marginal component effect for the four treatment dimensions. The dependent variable is the support for a surveillance policy (ten-point scale). The reference category for each dimension is a control attribute in which the dimension was not mentioned or specified. Lines around the point estimates indicate 95% confidence intervals.

The third and fourth dimension describe the counter-terrorism side. A specification of the policy-proposing party leads to a significant and substantial decrease in policy support (-0.49 [CI:-0.81, -0.17] when proposed by The Greens and -0.91 [CI:-1.23, -0.59] when proposed by the AfD). When the policy-proposing party is not specified, respondents might think of their preferred party (or at least not about a party they dislike), which leads to a stronger support of the policy. The majority of the respondents feel aversion toward the two parties specified in the treatment (40.52 percent toward The Greens, 72.36 percent toward the AfD) or are neutral toward them (37.32 percent toward The Greens,

15.86 percent toward the AfD). Only a small share is inclined to each of the two parties (22.16 percent to The Greens, 11.77 percent to the AfD).[10] Accordingly, on average respondents do not have a positive attitude toward the two parties, which leads to a lower support for the policy.

The fourth and last dimension specifies whether the proposed surveillance policy should be dragnet or targeted at suspect individuals or groups. Respondents' support for the dragnet policy is substantially and significantly lower (-0.57 [CI: -0.89, -0.25]) than for the not specified policy (control). Respondents' support for the targeted policy is substantially and significantly higher (0.66 [CI:0.34, 0.98]) than for the control.

These results do not corroborate Hypothesis 1a, because the direct threat of a terrorist attack does not change respondents' policy support.[11] In contrast, there is strong evidence for Hypothesis 1b: respondents do not want to be personally restricted by the given surveillance policy and are less likely to support dragnet measures.[12]

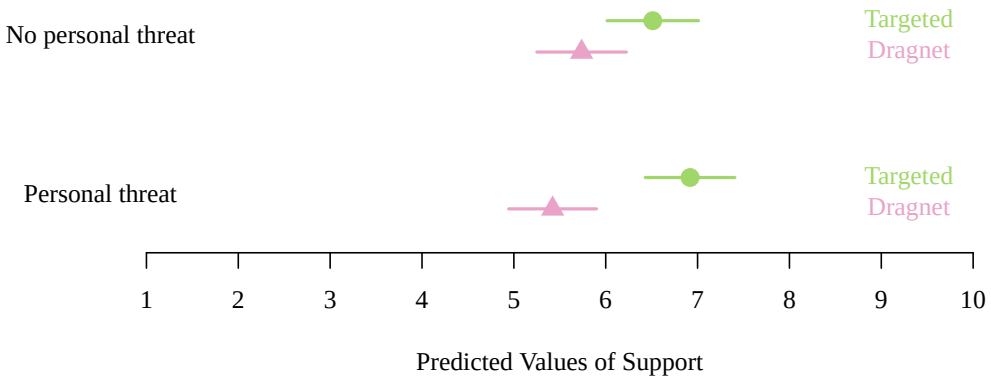


Figure 1.2: Predicted values for support for the different surveillance policies based on personal threat. Lines around the point estimates indicate 95% confidence intervals.

Interactions. Figure 1.2 shows the predicted policy support dependent on personal

[10] Regularly conducted surveys about Germans' party preferences (*Sonntagsfrage*) show similar numbers for the survey period.

[11] For a discussion see Section 1.5.

[12] This finding is further supported by a manipulation check, which shows that respondents feel significantly and substantially more restricted when the described surveillance measure is dragnet and not targeted (see Appendix section A.5).

threat and policy scope. In the absence of personal threat, there is no significant difference between support for a targeted measure and support for a dragnet surveillance measure. In contrast, when citizens are personally threatened, the support for a targeted measure is significantly and substantially larger than support for a dragnet measure. While personal threat increases the preference for a targeted over a dragnet measure, the effect differs from the expectations in Hypothesis 1c that support for surveillance would be higher under personal threat, independent of the policy scope. Therefore, there is no supporting evidence for Hypothesis 1c.

Figure 1.3 shows the predicted values for respondents' policy support based on the policy-proposing party and respondents' inclination or aversion to the AfD or The Greens.[13] When the policy is proposed by the AfD, support for the policy differs very strongly between respondents who are averse toward the AfD and respondents who are neutral or pro toward the AfD, by an average of roughly two points on a ten-point scale. However, respondents who sympathize with the AfD are not more likely to support the policy than neutral respondents. The panel for The Greens shows a similar picture. Policy support is identical on average among neutral and inclined respondents. Respondents who are averse to The Greens are on average 1.3 points less likely to support the policy than respondents who are sympathetic with or neutral to The Greens.

This evidence supports Hypothesis 2a that respondents will be less likely to support a counter-terrorism measure when it is proposed by a party they dislike. There is no support for Hypothesis 2b that respondents will be more likely to support such a measure when they are inclined to the policy-proposing party than when the policy-proposing is not specified.

To test Hypothesis 2c, it is necessary to compare whether the respondents have the same motivation as the terrorists. Using the previous setup, I investigate whether partisans of the AfD change their policy preference when the terrorists' motivation is right-wing extremist. I repeat this procedure for policy preferences of partisans of The Greens when terrorists' motivation is climate-radical. The results in Figure 1.4 show that the motivation of terrorists does not influence the policy support of partisans who have a similar ideology in a less extreme form. Since partisans of a single party are still a very heterogeneous

[13] See the Appendix A.4 for marginal means and results using the respondents' hypothetical party vote.

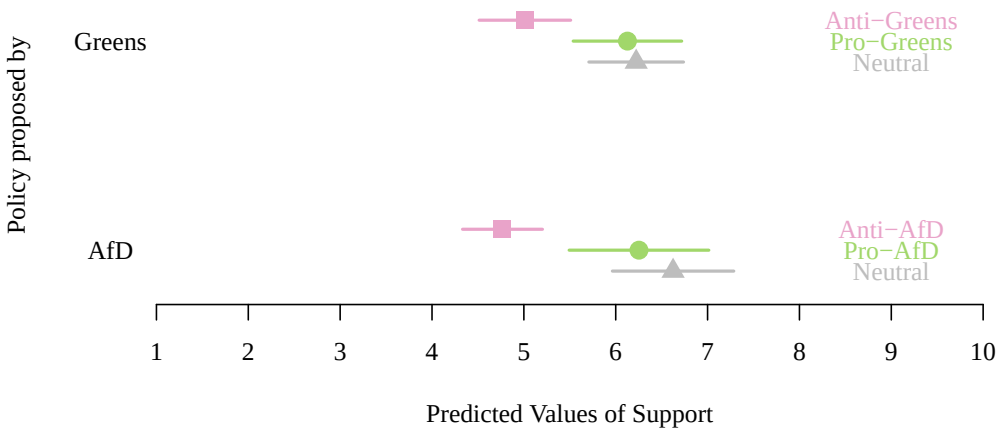


Figure 1.3: Predicted values for support for the surveillance policy based on the policy-proposing party and the inclination/disinclination to the respective party. Lines around the point estimates indicate 95% confidence intervals.

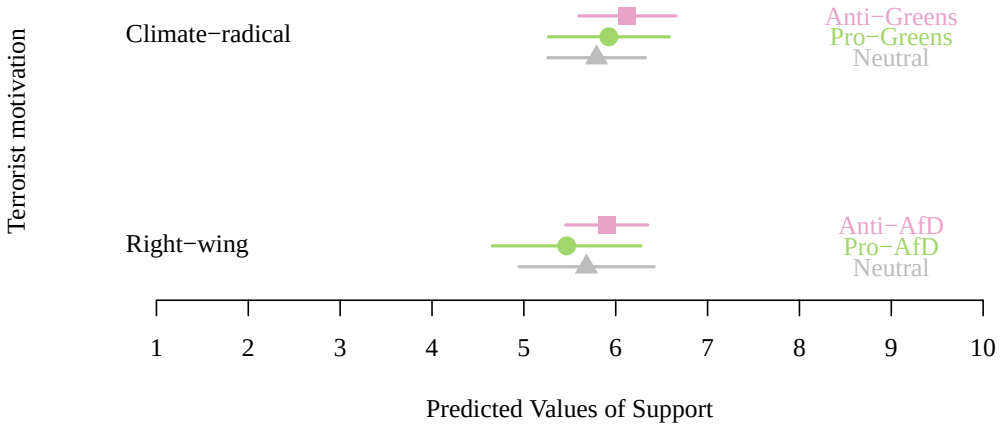


Figure 1.4: Predicted values for the support of the surveillance policy based on the motivation of terrorists and the inclination/disinclination to the AfD or The Greens. Lines around the point estimates indicate 95% confidence intervals.

group, I investigated additional subgroups based on their left–right self-assessment, their environmental attitudes, and their level of extremism. None of these yield any reduction in support for the counter-terrorism measure. Furthermore, I investigated combinations of these attributes: a high propensity to violence/high degree of extremism and a right self-assessment or a strong personal commitment to environmental protection (right extremists, far-right violent extremists, climate extremists, climate-violent extremists). Since the sub-

groups in this analysis are very small, the results should be taken carefully, but again there is no difference in support of these subgroups. Respondents' preferences for supporting a counter-terrorism measure is not driven by the motivation of the terrorists; consequently Hypothesis 2c is not confirmed.

For the remaining two hypotheses, 3a and 3b, we have to look at three-way interactions. For Hypothesis 3a, I compare how support for a policy proposed by a party to which respondents are averse changes depending on whether the terrorist attack poses a personal threat to the respondents (Figure 1.5). When the policy is proposed by The Greens, a small (+0.48) but not significant increase in support can be seen. When the policy is proposed by the AfD, the support deceases in comparison to the control group. This effect is even smaller (-0.25) and not significant. For Hypothesis 3b, I compare how support for a policy proposed by a party to which respondents are inclined changes depending on the policy being dragnet (Figure 1.6). For both parties, I find a very small (Greens -0.35; AfD 0.48) and not significant effect. In sum, the evidence does not support Hypothesis 3a and 3b.

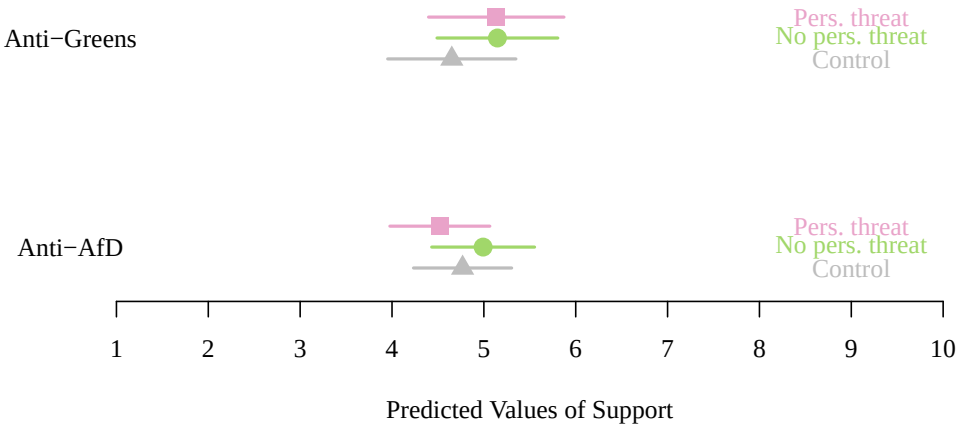


Figure 1.5: Predicted values for support of the surveillance policy. The policy is proposed by a party citizens are averse to. Results are shown for different degrees of exposure to threat. Lines around the point estimates indicate 95% confidence intervals.

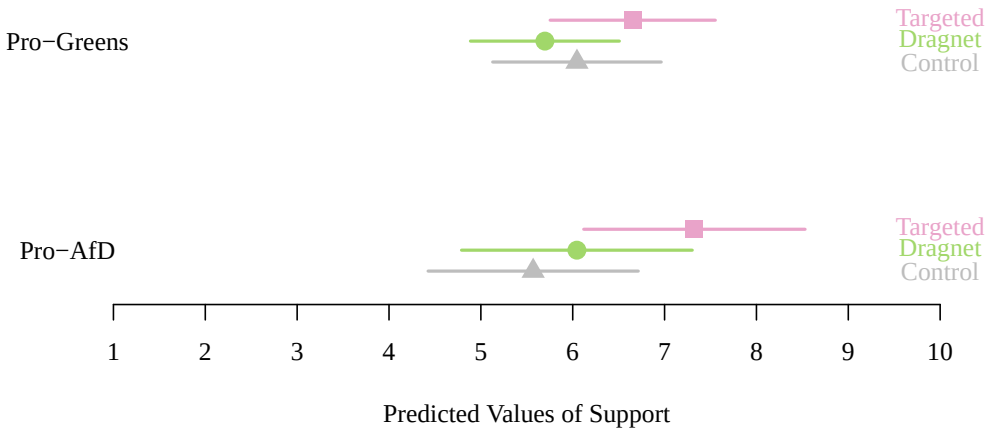


Figure 1.6: Predicted values for support of the surveillance policy. The policy is proposed by a party citizens are inclined to. Results are shown for different policy types. Lines around the point estimates indicate 95% confidence intervals.

1.5 Discussion

In this chapter I investigated how citizens cope with threat, restriction, and ideology (in the form of partisanship) and what influence this has on their preferences for civil liberties or security. The central findings of the study are that a) citizens who are averse to the party that proposes a security policy are clearly less likely to support this policy and b) citizens are less likely to support a security policy if it is dragnet and therefore restricts the citizens themselves. These two attributes dominated the preference formation in comparison to other factors. The study extends our understanding of (1) the influence of political polarization in a context in which citizens prefer a policy but have an aversion to the political actor that proposes the policy, (2) citizens' support for surveillance when they are personally affected, and (3) the rejection of any kind of terrorism, independent of the underlying ideology.

A direct translation to the real world depends on parties' behavior after an attack. If parties stand united, a rally-'round-the-flag effect can occur, in which partisanship plays a minor role and citizens support the the government's action (Kam & Ramos 2008). However, parties do not necessarily stand united. For example, in the aftermath of the aforementioned right-wing terrorist attack on people believed to have a migrant back-

ground in 2020 in Hanau, Germany, parties have not taken a unified position. Medeiros and Makhashvili (2022) examined the discourse on Twitter, where parties and individual politicians expressed their condolence, but also stated their opinions. The evolving discourse consisted of mainly two clusters. The first cluster contained messages from journalists, legacy media accounts, anti-racist activists, and politicians from the SPD and *Die Linke* (center-left and left-wing party). The second cluster was centered around the AfD, far-right political actors, and far-right spam accounts. The authors interpret the discourse as polarized (Medeiros & Makhashvili 2022: p. 45). This example is not an exception of the AfD being isolated in their position (Urman 2020). In such a case, i.e., when parties appear not uniform, the results of the study are likely to hold. The acceptance of policy proposals will depend to a certain degree on the policy-proposing party.

While this study investigated the specific context of terrorism, its implications are likely to apply to other external shocks. Terrorism is comparable to the threat of violence from other sources such as war or crime. Similarities appear in two regards, in the physical dimension and in the symbolic dimension (Vergani 2018: p. 23). This has also been shown in empirical studies that compared citizens' willingness to accept cuts in civil liberties when they are faced with crime instead of terrorism (Mondak & Hurwitz 2012).

The manipulation of threat as a single factor had no influence on citizens' support for surveillance (contrary to the expectations stated in Hypothesis 1a). This is in line with other experimental studies (such as Helbling et al. 2022), in which a treatment that included terrorist threat did not influence citizens' policy attitudes. However, it contradicts other experimental studies that have successfully shown an impact of terrorist threat on policy support by mentioning the number of victims in the past three years in their treatment (Ziller & Helbling 2021). In the present study, citizens were asked to imagine a terrorist attack. This attack was described as a) threatening for the individual citizen, their friends, and family, b) not threatening for the individual citizen, their friends, and family, or c) not further specified. Accordingly, respondents always had to imagine a terrorist attack. Even though respondents in group c) did not get any information whether the threat was personal or not, they still were asked to think about a terrorist attack. Since terrorism is generally threatening, this could explain why no differences were found between the threat

conditions. An alternative explanation would be a disconnection of perceived threat and actual situations: "Subjectively perceived threats do not necessarily have to correspond to an objectively threatening situation—if the latter can be determined at all" (Trüdinger 2019: p. 33). If citizens did not perceive the shown description as personally threatening, but feel threatened by terrorism in general, then we would expect no impact of the treatment dimension. This argument is supported by an additional analysis in which the perceived personal threat is investigated based on the treatment dimensions. The manipulation of threat did not change how respondents perceived personal threat (see Appendix A.5). A third explanation might be that social threat instead of personal threat explains citizens' preferences to increase security at the cost of civil liberties (Huddy et al. 2002: p. 488). Counter-terrorism policies are rather an answer to threat that affects the whole of society than to one that affects the individual. As previous research on policy preferences has shown, people try to evaluate what is not only the best for themselves but also for their surroundings (Sears et al. 1980). Therefore, they do not necessarily form policy preferences only according to their own situation and feelings. However, this explanation is less convincing since empirical studies have already shown the impact of personal threat on security preferences (Asbrock & Fritsche 2013; Hetherington & Suhay 2011).

For the impact of personal threat on support for targeted and dragnet policies, the result was rather surprising (see Figure 1.2). Personal threat does not increase the overall support for counter-terrorism policies (as expected prior to the study, stated in Hypothesis 1c), but instead changes the preference for the type of policy. When citizens are under threat, the support for targeted measures increases and the support for dragnet measures decreases compared to measures when citizens are under no personal threat. One possible explanation could be that people who are personally threatened do not want to be additionally targeted by a policy. They do not want to carry a double burden. Testing this hypothesis or alternative ones is left to future research.

In contrast to perceived threat, partisanship has a strong influence on citizens' support for a security policy. However, real-world threat is expected to reduce the strength of partisan cues. Instead of relying on party cues only, citizens make use of the best evidence they can find (Druckman et al. 2021). In the case of the here discussed security policy,

citizens would be expected to evaluate how effective the policy is to prevent them from threat. When considered effective, the impact of partisanship is expected to decrease. This relationship remains to be investigated in future studies.

The second dimension in which no differences in policy support was found concerns the motivation of the terrorists in the treatment. Hypothesis 2c stated that the support for counter-terrorism measures would decrease when citizens share the ideology of terrorist actors. While it was quite unlikely to find support for terrorist actions in the general population, it is reassuring that terrorist motivation does not influence citizens' support for counter-measures. Normatively speaking, this is positive news for democracy. A natural experiment has shown that right-wing extremist attacks shifted citizens who hold a right ideology away from this ideology (Pickard et al. 2023). The present study contributes to this finding by showing that other ideologies also do not lead respondents to change their preference for civil liberties.

Lastly, there was no significance for the small effect sizes for Hypothesis 3a and 3b. Personal threat did not overrule the disliking of a party and becoming target of surveillance did not lower citizens' policy support when the policy was proposed by the citizens' preferred party. Since three-way interactions were needed in this study to test these hypotheses, the experimental power was rather low, which makes it difficult to detect small effect sizes. As a result, these hypotheses cannot be rejected with high certainty. Instead, this provides ground for future research with more tailored experimental designs to examine the relationship between action by preferred parties and restrictions for individual citizens.

Subject to the limitations noted above, the findings indicate that citizens' attitudes toward security are rather shaped by counter-terrorism than by terrorism. First, citizens' agreement with security policies rather depends on the scope of the policy and whether they are affected by it. Second, their support of these policies depends on their liking or disliking of the policy-proposing party. Since counter-terrorism, and the discussed issue of surveillance in particular, is preventive in nature, these factors outweigh the terrorist motivation and personal threat. The study contributes to the understanding of citizens' preferences for security policies in a context in which the need for such policies is empha-

sized. In a broader sense, this has implications for political polarization because citizens are less likely to support otherwise preferred policies if they are proposed by a party the citizens disliked.

1.6 Additional Information

Ethics Information. This research complies with the ethical regulations for research carried out with human participants. The design was reviewed and approved by the Ethics Commission of the University of Mannheim (EK 20/2022). Informed consent was obtained from all respondents before participation. Participants received equal compensation for their participation.

Chapter 2

Do emotions mediate the impact of threat on individuals' policy preferences? Evidence from a parallel encouragement experiment.

Coauthored with Sandra N. Morgenstern

Abstract

How a politician communicates a threat influences individuals' policy preferences, especially concerning the trade-off between security and freedom. Recent theories in political psychology suggest that emotions play a crucial role in this context, acting as a mediator between threat and the public's policy preferences. Analyzing this relationship requires mediation analysis. However, existing mediation models face significant limitations in terms of causal interpretation. We address this issue using a novel experimental approach for our mediation analysis, parallel encouragement design (PED), which allows us to manipulate not only the treatment but also the mediator. Specifically, we induce different emotional responses (anxiety and anger) to examine their effects on the outcome variable. Our results do not support the expected mediation effect of emotions on the relationship between threat communication and policy preferences: Neither does anxiety-inducing threat communication lead individuals to increased support for security, nor does anger-inducing threat communication lead to increased support for freedom. Based on a comprehensive data collection with multiple pre- and robustness tests, we compare the results of our model using the PED with the results of alternative mediation approaches and reflect on the implications for the literature. We conclude by raising new questions about emotions in political science research.

Keywords: threat, emotions, policy preferences, mediation, experiment

2.1 Introduction

It is widely acknowledged that the way a politician communicates a threat shapes the public's policy preferences (Balzacq et al. 2016; Lehrer et al. 2025; McDonald 2008; T. Rudolph 2021). In the following, we refer to this process of delivering threat-related information as *threat communication*. In general, it is assumed that threat communication encourages people to prioritize security over other political concerns (Davis & Silver 2004; Huddy et al. 2005). However, recent literature has questioned whether this link between threat communication and security preferences is universal (Marcus 2021; Marcus et al. 2019; Mondak & Hurwitz 2012). More recent examples show that threat communication can also lead to a prioritization of freedom, i.e., exactly the opposite (Humprecht et al. 2024; Skitka et al. 2006).

Theory suggests that emotions are a key mechanism through which threat communication shapes policy preferences. Two emotions are predominantly studied as mediators after exposure to threat communication: anger and anxiety. When citizens are exposed to different kinds of threat communication, one or the other of these emotions may be dominant (Lazarus 1991a; Marcus et al. 2000; Moors 2017; Petersen 2010). Research has shown that anger and anxiety, although both negative emotions, influence policy preferences in different ways (Marcus et al. 2019): anger is typically associated with a preference for freedom and anxiety with a preference for security.

Analyzing this mechanism requires mediation analysis, but the "study of mediation is more demanding than most social scientists suppose" (Green et al. 2010: p. 200). Despite growing recognition of the limitations of mediation analysis in establishing causal claims (e.g. Bullock & Shang 2012), the descriptive approach by Baron and Kenny (1986) remains widely used in empirical research. In addition to some methodological developments (Imai 2011; Preacher & Hayes 2004), the approach still relies on strong assumptions. These assumptions are unlikely to hold in most cases and often remain undiscussed. However, methodological research has made significant progress beyond this classical mediation approach. We argue that, given the availability of these more advanced methods, the mediating effect of emotions should be subjected to another test.

We draw on a new experimental method for mediation analysis by Imai et al. (2013), called parallel encouragement design (PED). This causal mediation approach allows us to independently manipulate both the treatment (threat communication) and the mediator (emotions) and thus to study how different emotions mediate the effect of threat communication on individuals' policy preferences along the lines of security and freedom. We implemented this approach in the form of a pre-registered[1] experiment in a survey of a population-matching sample in Germany with N=2,207 participants.

The results of the PED experiment do not support the expectation that emotions mediate the relationship between threat communication and policy preferences. We find no evidence of increased support for security when threat communication includes anxiety-inducing elements, nor of increased support for freedom when it includes anger-inducing elements, while we show that the threat directly increases support for more security. The results suggest that the emotional reactions of the public have a smaller influence on policy preferences than expected. Consequently, the average citizen is less susceptible to manipulation than one might expect.

With this causal evidence, our study sheds new light on the mediating role of emotions in the relationship between threat communication and policy preferences. Using innovative methods, we put long-standing arguments and recent theoretical developments regarding the role of emotions in the communication of politicians to the empirical test. Despite the indisputable need to test the theoretical model of mediation causally and the desire to be scientifically critical (Arceneaux et al. 2025), the analytical difficulty may have prevented implementation (e.g., Bullock and Shang 2012). To our knowledge, this is the first study to conduct a comprehensive causal mediation analysis of the mediating effect of emotions outside of a pure laboratory setting (Lambert et al. 2010). We compare the insights generated by this new methodological approach with those of alternative mediation analysis approaches and discuss their implications for our theoretical understanding of the mediating effect of emotions. Our results align with previous findings in political science research regarding the direct link of threat toward security, but also highlight possible limitations and raise new questions about how emotions act as mediators in

[1] See https://osf.io/pr38u?view_only=9f3ce0496d7648a8aea5a6811cf11f67

the context of policy preferences.

2.2 Theory: the mediating role of emotions

Scholars are increasingly emphasizing the role of emotions in shaping the relationship between threat[2] and policy preferences among the public. One strand of the literature holds that threat and emotions are correlated, but not causally linked (Halperin et al. 2009; Huddy et al. 2005). In contrast, a growing body of literature conceptualizes the relationship as sequential: how individuals perceive a threat triggers emotional responses, which subsequently shape policy preferences (Marcus et al. 2005). This *basic theoretical model*, is illustrated in in the upper part of Figure 2.1. The emotion-mediated pathway describes how the communication of a threat can shape individuals' policy preferences depending on the emotional state generated.

In our study, we focus on the emotional reactions of anxiety[3] and anger. Research has shown that these two emotions, although both negative ones, prompt distinct reactions, thus shaping policy preferences in different ways (Marcus 2021): Anxiety fosters the desire for protection, resulting in greater support for security measures, such as anti-immigrant policies (Brader et al. 2008), and national isolationism (Huddy et al. 2005), while anger increases the desire for freedom (Huddy, Feldman, & Cassese 2007; Marcus et al. 2019). We summarize the emotion-mediated mechanism of anxiety and anger as *detailed theoretical model* in Figure 2.1.

The emotional response to a threat depends on various elements embedded in the given communication context (Frijda et al. 1989; Lazarus 1991b, 2001). This contextual influence can also be found in the concept of the power of the situation (Allport 1935) and the appraisal model (C. A. Smith & Ellsworth 1985). Contextual elements can be (strategically) employed by communicating actors to shape their portrayal of a threat: specific aspects can be discussed in great detail, mentioned only briefly, or omitted entirely—

[2] This threat may be rooted in reality or perception (Helbling & Morgenstern 2023; J. M. Miller & Krosnick 2004).

[3] Due to the difficulty of (empirically) differentiating between anxiety and fear, we use the term "anxiety" throughout this article (see discussion in Lerner & Keltner 2000).

depending on the intended narrative and communicative goals. Although this theoretical contextualization shares features with established framing approaches, our concept of threat communication differs from them fundamentally. In framing approaches, a single setting is typically presented from two distinct perspectives, e.g., the glass being described as either half empty or half full (Druckman & McDermott 2008). Our approach, in contrast, focuses on how different forms of contextualizing a threat can activate different emotional reactions.

The main elements in threat communication that have been shown to evoke negative emotions are uncertainty and injustice. Uncertainty is central to the perceived inability to cope with a situation. Individuals who are unable to cope with a situation, and therefore have a low situational locus of control, tend to respond to threats with anxiety (Lazarus 2001; Marcus et al. 2019). Contextual elements in threat communication that convey uncertainty include a low tangibility of a threat, the difficulty of defining and localizing a threat, the novelty of the threat, and the uncertain existence of the threat. We group these different elements of contextualization under the term "threat with uncertainty". In contrast, individuals with a high internal locus of control tend to respond to threats with anger, as they feel empowered to take corrective action (Lerner & Keltner 2000). However, the perceived ability to cope does not directly translate into feelings of anger. Based on evolutionary psychology, injustice is the central element of communication that arouses anger (Marcus 2021; Petersen 2010). These perceptions of injustice are created through the violation of social norms, which can happen at a societal or individual level. We refer to these contextual elements in threat communication as "threat with injustice".[4]

Hence, in line with theories on the role of emotions in communication, we investigate the mechanism underlying the relationship between threat communication and policy preferences. These theories suggest that threat communication may (strategically) employ different elements, which evoke one of the two distinct emotions, anger and anxiety. Depending on the emotion that is aroused, individuals' preferences regarding how to deal with the threat are likely to diverge. The first path is the expected mechanism of

[4] An overview of the emotion-inducing elements that have been used to create the communicated threat in the survey experiment can be found in Table 2.1.

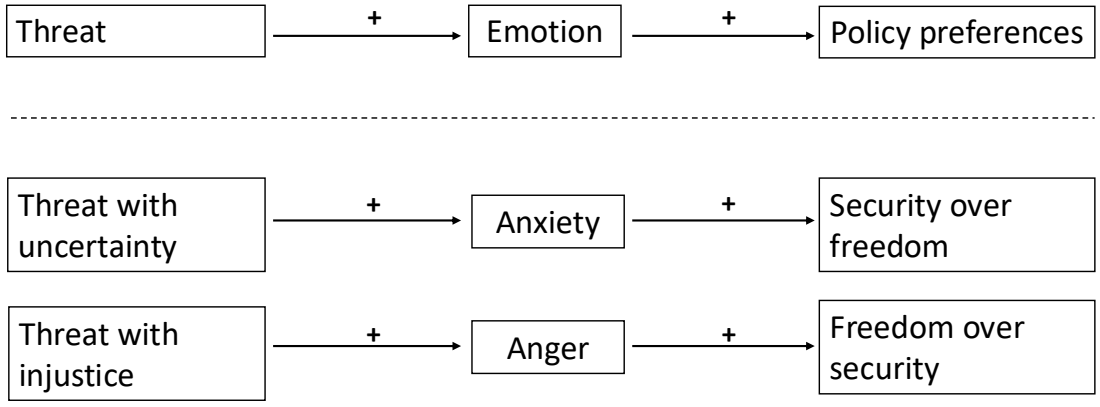


Figure 2.1: Theoretical models. The basic theoretical model in the upper panel presents the generalized causal chain from threat to emotions to policy preferences. The detailed theoretical models in the lower panel illustrate the mediation paths of the two emotions we test, anxiety (H1) and anger (H2).

threat communication including elements of uncertainty, which trigger anxiety and cause an individual to prefer security over freedom. The second path hypothesizes the expected opposite effect of threat communication including contextual elements of injustice, which arouse anger and cause an individual to prefer freedom over security. Based on these expectations, we derive the following hypotheses:

- H1: When threat communication involves *anxiety-inducing elements*, individuals are more likely to prioritize security over freedom, and this effect is mediated through anxiety.

- H2: When threat communication involves *anger-inducing elements*, individuals are more likely to prioritize freedom over security, and this effect is mediated through anger.

2.3 Methodological approach: mediation analysis

Mediation models focus on the indirect effect of a treatment on the outcome influenced by a mediator, also called the average causal mediation effect (ACME). Applied to our study, this means that threat communication (the treatment) evokes an emotion (the mediator) in an individual, which in turn influences the individual's policy preferences regarding the prioritization of security or freedom (outcome). Based on theoretical arguments, as seen in Figure 2.1, we expect full mediation. This implies the absence of a direct, unmediated effect of threat communication on policy preferences. Figure 2.2 visualizes the decomposition of the model effects into a direct effect and an indirect effect. The direct effect is the effect of the treatment on the outcome (dotted arrow). It is of secondary interest in our study and serves only as a comparison to make claims about the mechanism of interest. The indirect effect is the hypothesized effect of the treatment on the outcome through the mediator (solid arrows).

To causally identify the ACME, we apply a parallel encouragement design (PED), as proposed by Imai et al. (2013). This design-based methodological approach relies on the potential outcome framework for causal inference (Neyman et al. [1923] 1990; Rubin 2005) and its application to mediation analysis (Imai, Keele, & Tingley 2010; Imai et al. 2011). In the PED, both the treatment and the mediator are manipulated. Although the model was introduced more than a decade ago and the manipulation of the mediator represents a significant methodological advance to study causality, it has rarely been applied (for a notable exception, see Belardinelli et al. 2022). In the vast majority of studies that experiment with mediation, only the treatment is manipulated (Gerber & Green 2012) and the mediator is measured after treatment, which requires hard-to-fulfill assumptions, especially about the mediator.

In the PED, the sample is randomly divided into two parallel groups. In one group, the treatment is manipulated and the mediator is measured. In the other group, both the treatment and the mediator are manipulated randomly and independently of each other. Since emotions cannot be directly manipulated, we treat them using an encouragement, i.e., we manipulate them indirectly with a stimulus that triggers these emotions (Spencer

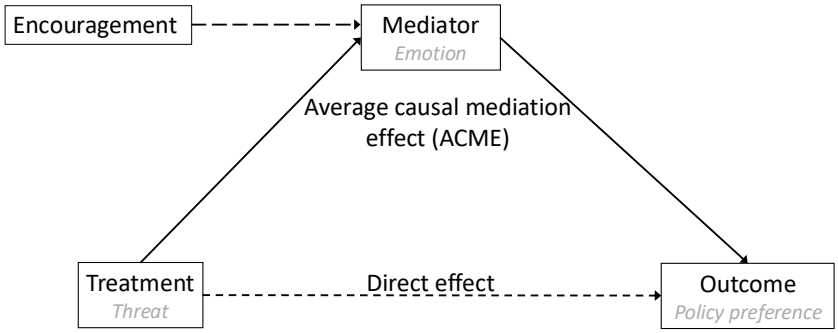


Figure 2.2: Core elements of mediation analysis: indirect effect, i.e., average causal mediation effect (ACME), and direct effect. The encouragement represents the manipulation of the mediator, which distinguishes this causal mediation approach from earlier mediation analyses.

et al. 2005), as shown in Figure 2.2. The additional manipulation of the mediator may help address key problems of descriptive mediation and thus empirically circumvents hard-to-fulfill model assumptions.

The ACME can then be estimated using the parallel groups. The central quantities of interest are the "average complier indirect effects" as defined by Imai et al. (2013: p. 20):

$$\overline{\delta}^{*}(t) = \mathbb{E}[Y_i\{t, M_i(t,0)\} - Y_i\{t, M_i(t',0)\} \mid (M_i(t,-1), M_i(t,0), M_i(t,1)) \in \{(0,0,1),(0,1,1)\}],$$

for $t = 0, 1$ and $t \neq t'$; where $M_i(t, z)$ is the measured mediator based on treatment t and encouragement z. The compliers are those individuals who are affected by the encouragement in the intended direction, conditional on their treatment assignment.

To test our hypotheses, we estimate sharp bounds of the indirect effect in the mediation model. Sharp bounds are a similar construct to the confidence intervals known from OLS frequentist approaches, since they provide a range in which the estimate can fall. In contrast to OLS approaches, however, they do not indicate sampling uncertainty, but are guaranteed to contain the true value of the average indirect effect, provided that the stated assumptions hold (Manski 1995; Sjölander 2009). Because they account for all possible values consistent with the assumptions, sharp bounds are often wider than traditional confidence intervals. Therefore, if these bounds do not include zero, we consider the effect

to be significant.

The PED relies on three assumptions: randomization of treatment and encouragement, exclusion restriction, and monotonicity (Imai et al. 2013). The first assumption is fulfilled qua design; the treatment and the encouragement are randomly distributed independently of one another. In experimental designs the exclusion restriction presupposes "that the encouragement affects the outcome only through the mediator" (Imai et al. 2013: p. 19). However, the PED relaxes this assumption by "allowing for imperfect manipulation of the mediator"(Imai et al. 2013: p. 19). Given that we use an encouragement in our design, we expect the exclusion restriction specified for the PED to apply. The monotonicity assumption implies that the encouragement influences all participants in the same direction, meaning that there are no defiers. To minimize the likelihood of defection, we use an encouragement that is well tested and established in the literature (see "Mediator: emotion" in the next section for more details). Additionally, indirect manipulation may induce unequal levels of change in the mediator per subject, which does not interfere with the intended manipulation in general but leads to heterogeneity within the mediator.

2.4 Study design

Data. The online survey was conducted in Germany between January 3, 2024, and January 12, 2024, with a final sample of 2,207 respondents.[5] Participants were recruited via a survey company (Bilendi & Respondi). Eligibility for participation required full legal age, informed consent and successful completion of an attention check, which was passed by 93.5% of respondents; 32.75% dropped out of the survey. All participants were compensated for their time according to the survey company's regulations.

Sample. The sample reflects the German population in terms of age, gender, and education (see Table B.1 for distributions). After data management, the final samples used for the main analysis comprised N=1,043 for the anxiety experiment (Experiment I, Figure 2.3) and N=991 for the anger experiment (Experiment II, Figure 2.3). Respondents assigned to the neutral control group without encouragement served as the control group

[5] For a discussion and background of the German case, see subsection B.1.1.

in both sub-experiments.

Experimental setup. We divided our sample into two experimental groups—each receiving a different treatment arm. Experiment I tested the mediating effect of anxiety, Experiment II that of anger. The experimental setup is visualized in Figure 2.3. Furthermore, respondents could also be assigned to a third group, which is not visualized in Figure 2.3. This group was not exposed to any treatment and served as the control group.

As a key feature of the parallel design, each experimental group was further split randomly in half and subjected to a sub-experiment. In Sub-experiments I.I and II.I, the treatment was randomized, and both the mediator and the outcome were measured—following standard experimental procedures commonly found in the literature. In Sub-experiments I.II and II.II, the mediator was additionally manipulated through random assignment (Imai et al. 2013). As the mediator could not be directly manipulated, its value was randomly encouraged (Angrist et al. 1996; Imai et al. 2013). If the sequential ignorability assumption, which is a strong but conventionally accepted assumption in descriptive mediation experiments, holds, the results of the two sub-experiments should be identical. The encouragement in the second sub-experiment should just validate the status of the mediator that respondents have due to the treatment. The comparison between the two sub-experiments identifies the causal effect of the mediator on the treatment.

Power. The targeted sample size shown in Figure 2.3 is based on the power calculations for the experimental arms without the encouragement (see Appendix subsection B.1.3). In Sub-experiments I.I and II.I, in which no encouragement takes place, the sample size is each 1/6 of our overall sample size. In Sub-experiments I.II and II.II, the targeted sample size is each 1/3 (i.e. 2/6) of our overall sample size because two encouragements are assigned (emotion or neutral). The power calculations are based on estimations of our second pre-study (see section B.3), in which we implemented the design without manipulating the mediator in a convenient sample. If the pre-study estimates align with the study effect estimates, we would achieve a power of 0.95 with a sample of N=290. We varied the level of expected noise and effect size to obtain insight into the resulting power expectation (see Figure B.2). To account for potential noise variation or different effect estimates in comparison to the pre-study, we decided to target an overall

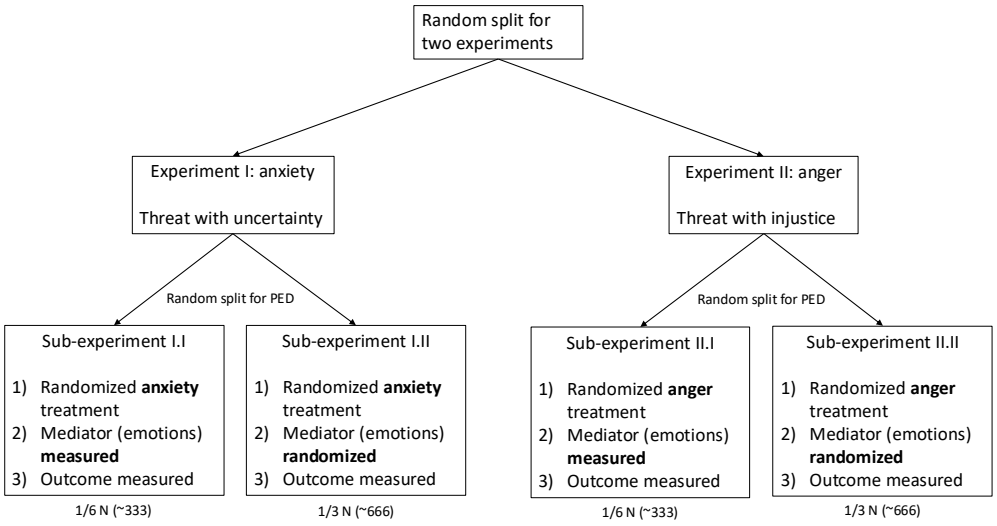


Figure 2.3: Setup of the experiment. We first divided the sample into two treatment arms (Experiment I: threat with uncertainty; Experiment II: threat with injustice) and a control group. In the next step, we applied the parallel encouragement design (PED) and further divided each experiment into two sub-experiments; targeted sample sizes based on the power calculation are indicated below the boxes per group.

sample of N=2,000 and hence an N=1,000 per sub-experiment and N=333 per treatment group.

Outcome: policy preferences. We estimate policy preferences using a classical measure, asking respondents to indicate their level of support or opposition to a given policy on an eleven-point scale. We asked whether Germany should support or oppose the EU policy Smart Borders, with responses ranging from -5 "strongly against" to +5 "strongly in favor". Smart Borders is a European immigration policy aimed at automating border control procedures. Two aspects are particularly relevant to our study. First, the policy embodies a fundamental conflict between security and freedom. Supporters argue that the policy enhances security by facilitating the identification of individuals who are not permitted to enter the country. In contrast, critics contend that the extensive database required for implementation poses a significant threat to citizens' privacy rights. Second, the topic leaves room for an opinion shift. Our pre-studies revealed that the policy is largely unfamiliar or entirely unknown to the public (see Figure B.6d). As a result, we expect that

our respondents' opinions about the policy are not firmly established and therefore susceptible to change with external influence. We further consider this measure a real-world application of the broader trade-off between individual freedom and collective security. The results of our preliminary study support this expectation (see section B.2). See subsection B.1.4 for a more detailed discussion of the case.

Since the PED analysis requires a binary outcome measure, we coded all values of the dependent variable below 0 on the original scale as 0 (indicating a preference for freedom) and all values above 0 as 1 (indicating a preference for security). Respondents who showed no preference in either direction (0 on the original scale) were excluded from the analysis (18.76% of the sample).

Additionally, we used a second outcome measure to obtain more detailed information on the respondents' support for Smart Borders. This measure included six statements derived from Lehtonen and Aalto (2017), with three supporting freedom (and thus opposing Smart Borders) and three supporting security (and thus supporting Smart Borders (see Appendix B.1.5 for the full list). Respondents were asked to rank these arguments in order of their perceived importance. To facilitate analysis, we recoded the ranking into three groups: respondents who ranked two pro-arguments highest were categorized as "for" Smart Borders, those who ranked two contra-arguments highest as "against" Smart Borders, and those who ranked one of each highest as "mixed" (Kroh 2009).

Treatment. The treatments for the two experiments, namely threat communication with anxiety-inducing elements and threat communication with anger-inducing elements, were designed analogously. First, each participant received a brief introduction to the topic in the form of a fictional excerpt from a fact sheet (*Eckpunktepapier*), as used in the German *Bundestag* to provide a general introduction or overview to a topic under discussion. In this excerpt, we explained what Smart Borders is and that it is being debated in the German Bundestag, presenting an argument for each side of the debate. The text was accompanied by a picture of the German Bundestag to emphasize the contextual setting. Second, respondents in the control group were directed to the follow-up questions, while respondents in the treatment group received an excerpt from a transcript of a fictitious political speech about immigration, which was inspired in content and style by the "negative

crime script" (that did not distinguish between anger and fear) (Brader 2005).

The two-paragraph speech describes immigration as a threat, employing anxiety-inducing elements in Experiment I and anger-inducing elements in Experiment II. As known from the research literature and corroborated in both of our pre-studies, triggering a measurable[6] emotion level in an audience from a short text is challenging. Therefore, our treatment was designed to be as strong as possible, incorporating several factors identified in the literature as triggering the two emotions of interest (see Table 2.1). However, our design does not allow us to identify the effect of each dimension or element individually. Instead, the objective of this study is to find first evidence for the hypothesized mechanisms as a function of perceived emotion.

To reinforce the emotional element of the treatment, respondents were shown a picture at the end of the treatment text. The picture showed an actor mimicking a politician delivering a speech, with their facial emotional expression varying according to the treatment condition. This approach follows Neuman et al. (2018) and Marcus et al. (2017). More details about the selected image, the treatment material, and its validation can be found in the appendix subsection B.1.6.

Mediator: emotion. The mediator is operationalized in two ways. First, we used a *self-reported emotion measurement*: After the treatment, participants were asked to indicate on a scale from zero to ten how strongly they felt each of the six main emotions—anxiety, joy, sadness, anger, disgust, and a neutral state—while reading the fictitious speech. In the analytical part, this variable is transformed into a binary variable for comparability with the second manipulation of the mediator, indicating whether anger or anxiety is present (values$>$0) or not (values=0). As robustness specifications, we use a variable that indicates whether the respective emotion is the strongest emotion or not.

Second, in Sub-experiment I.II and II.II, the mediator condition was experimentally manipulated using an encouragement task (see Figure 2.3), namely an autobiographic emotional memory task (AEMT), which is a well-established method of indirectly ma-

[6]Emotion measurements via skin conductance or video observation can detect already small and potentially even precautious levels of emotion (Bakker et al. 2021). If we assume that self-reported emotions align with affect (Bradley et al. 2001), survey measurements can be a hard test, i.e., a certain level of emotion needs to be reported in surveys.

Table 2.1: Operationalization of emotion-inducing elements in contextual threat communication. The table shows the different dimensions used in the treatment. Threat of injustice is created based on the literature around anger-inducing elements, while threat of uncertainty is built on insights around anxiety-inducing elements.

Element	Threat with injustice	Threat with uncertainty	Literature
Uncertainty	Controlled setting	Uncertain setting	Roseman 1984, Frijda et al. 1989, Lazarus 1991, Smith and Ellsworth 1985, Cassese and Weber 2011, Lerner and Keltner 2001, Todd et al. 2015, Tiedens and Linton 2001, MacKuen et al. 2010, Marcus et al. 2019
Coping	I/state has control	Not under control	Smith and Ellsworth 1985, Frijda 1986, Frijda et al. 1989, Lazarus 1991, Carver and Harmon-Jones 2009, Cassese and Weber 2011, Lerner and Keltner 2001, Tiedens and Linton 2001
Understanding	Tangible	Hard to grasp	Carver and Harmon-Jones 2009, Frijda 1986, Lazarus 1991, Lerner and Keltner 2001, Smith and Ellsworth 1985, Wagner 2014
Newness	Usual situation	Unusual new situation	Frijda et al. 1989, Lazarus 1991, Smith and Ellsworth 1985, MacKuen et al. 2010, Marcus et al. 2019
Direction	Directional, directed outwards	Non-directional, self-directed	Roseman 1984
Norm	Norm violation	No norm violation	Banks and Valentino 2012, MacKuen et al. 2010, Valentino et al. 2011, Phan et al. 2002, Haidt 2003, Fiddick 2004, Tooby et al. 2008
Justice	Injustice	No relevant aspect	Petersen 2010
Grievance	Grievance	Grievance	Vasilopoulos et al. 2019

nipulating emotions (Strack et al. 1985). In an AEMT, participants are asked to describe a situation in which they felt a particular emotion and relive the situation in their minds, with the aim of returning to the emotional state. See Appendix section subsection B.1.7

for more details.

An assumption needed for an accurate estimation using the PED is the monotonicity assumption, which states that the encouragement works in the intended direction. We expected that this assumption would hold in our case, as using the AEMT method as encouragement is very clear and well established in the literature. However, applying a two-stage least squares (2SLS) model using the encouragement as an instrument (see Table B.10 and Table B.11) revealed an insignificant "weak instrument" test result for the anxiety experiment. This shows that the first-stage relationship between the instrument and the emotional response is weak and therefore that the encouragement is an unsatisfactory manipulation of the emotion. Additional tests revealed that this assumption was violated due to an unintended manipulation of the neutral group. Although the neutral group was not supposed to indicate any specific emotion more pronounced than other emotions after the AEMT, our analyses show a variation of dominant emotions in this group.

In light of the monotonicity assumption, we removed obvious or clear defiers from the sample. Defiers are respondents in the neutral encouragement group who report an anxiety level of three or higher (on a scale from 0 to 10) and those in the emotion encouragement of anxiety or anger who report a score of 0 for the emotion of interest (on a scale from 0 to 10). What remained was a subsample of participants for which the monotonicity assumption is more likely to hold. This procedure has the advantage of enabling the measurement of the causal mediation effect, but also that it may only apply to a potentially non-representative subsample. Table B.1 shows the demographic distribution of the subsample for the two experiments, which is very similar to the whole sample.

2.5 Results

We begin by analyzing the fundamental link between threat communication and policy preferences. This direct link is generally undisputed in the literature. Our results confirm the findings of previous research: the communicated threat has a significant, direct impact on respondents' policy preferences, making them more likely to support policies that

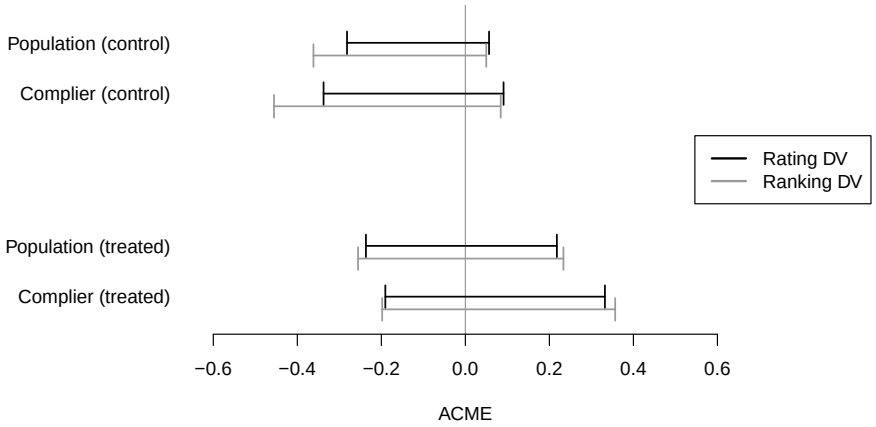
prioritize security over freedom (see Appendix Table B.5).

We then move to our analysis of the PED. The results of the causal mediation analysis presented in Figure 2.4 show the estimation of the indirect effect, i.e., the average causal mediation effect (ACME). The model testing the mediating role of the emotion anxiety uses data from Experiment I, whereas the model testing the mediating role of anger uses data from Experiment II in Figure 2.3. For each model specification, we report sharp bounds for the population (the analyzed sub-sample without defiers in the neutral encouragement group) and for compliers (affected by the encouragement that matches the intended direction of the treatment). For both of these groups, we show the ACME for those in the treatment group and in the control group, as the mediator is dependent on the treatment status.

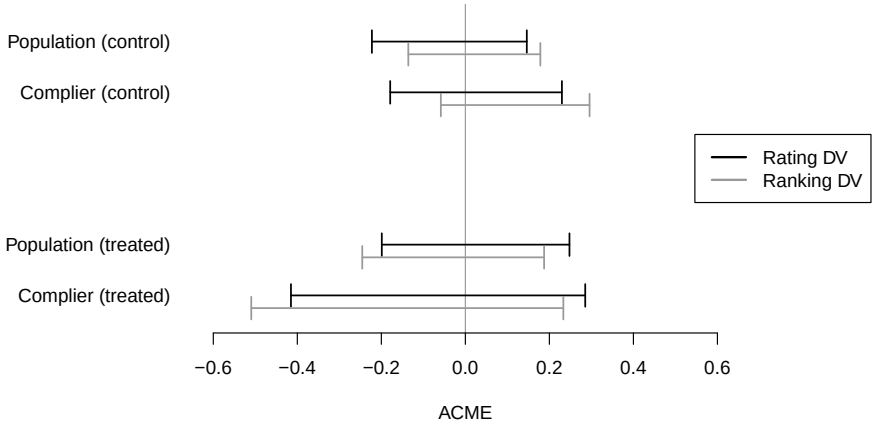
In contrast to our expectations, the results show that neither anxiety nor anger has a mediating effect. This holds for both measurements of our outcome of interest: the one based on the direct question (regarding support for Smart Borders) and the one based on the ranking of arguments for/against the policy. Different model specifications, e.g., alternative codings of the mediator or the ranking-based variable, consistently yield a null finding for the ACME estimate, i.e., indirect mediation. Given the intensive pretests and the high internal validity of all components of the experimental design, we consider it reasonable to assume that no mediation effect is present in our sample. Accordingly, we find no support for Hypotheses H1 and H2.

2.6 Discussion

Our analysis based on a parallel encouragement design, a methodologically advanced experimental approach to mediation analysis, revealed no evidence of a mediating effect of emotions on the relationship between threat communication and policy preferences. This finding is unexpected given that many studies have investigated the two paths (treatment-mediator and mediator-outcome, see Figure 2.2) of the indirect link separately. We are particularly surprised by the estimated effect of the mediator on the outcome (second path, emotions on policy preferences). A large body of literature has shown an impact in this



(a) Anxiety experiment.



(b) Anger experiment.

Figure 2.4: Results from the parallel encouragement design (PED). Black lines represent results for the main dependent variable, respondents' support for Smart Borders. Grey lines illustrate results for the second dependent variable, respondents' ranking by importance of different arguments for and against Smart Borders. The bars show sharp bounds of the ACME for different subgroups. The most interesting case is the estimate for the treated compliers, which indicates that the theorized mediation link is empirically not supported. The subsample that received the neutral encouragement is restricted to respondents who report a level below 3 (on a scale from 0 to 10) for the emotion of interest (anger/anxiety). The emotion encouragement subsample is restricted to those who report a level of > 0 for the emotion of interest.

area (Huddy et al. 2005; Lerner et al. 2003; Petersen 2010). To ensure that this null finding cannot be attributed to the experimental design, we took several precautionary steps, which we will elaborate on below.

2.6.1 Robustness of the null finding

Some features of the experimental design need to be discussed to evaluate the robustness of the results. First, one might suspect that the treatment might simply be too weak for detecting an effect with the given design. We constructed the treatment to be as strong as possible in the context of a survey, manipulating multiple dimensions according to theoretical considerations (see Table 2.1). Appraisal theory (Lazarus 1991a; Moors 2017) and affective intelligence theory (Marcus et al. 2000) provide arguments for when and why these distinct yet closely correlated emotions are triggered. Anxiety tends to be triggered by high uncertainty, low tangibility, and the newness of the situation with respect to the communicated threat. Anger, by contrast, is typically associated with high coping capacity, high tangibility, and a form of norm violation and injustice. All of these elements were incorporated into the treatment. To further enhance the treatment's emotional impact, we supplemented the textual descriptions with illustrative images. Second, although theoretically grounded, the treatment might have idiosyncrasies that may prevent the intended impact. To ensure that our treatment is well designed and that the operationalizations of the dependent variables, the treatment, and the mediator have high internal validity, we conducted two pre-studies (N=2274, N=265). The first pre-study was pre-registered and implemented as part of a larger research project in 2022 with N=2,274 participants.[7] The second pre-study was a small follow-up to the first, focusing exclusively on strengthening the treatment. Conducted in 2023 without pre-registration, the test-study included 265 participants. Detailed results from the pre-studies are described in the section B.2 and B.3. In addition, several descriptive statistics provide evidence supporting the effectiveness of the treatment manipulation. Most notably, our analyses replicate previous findings demonstrating an effect of threat communication on preferences for security, while providing no evidence for a mediating effect of emotions. Additionally, the results of the

[7] Pre-registered at OSF https://osf.io/haeu7.

treatment manipulation checks support the assumption that participants read and understood the treatment as intended.

In general, we ran multiple tests on the experimental components to ensure the internal validity of the experiment. Additionally, we ensured sufficient statistical power by not relying on the bare minimum. Owing to the final sample size and the expected estimate sizes from the pre-studies, statistical power was above 0.95. Through these iterative revisions, we took care to design the treatment such that any null findings could be interpreted as meaningful evidence rather than being attributed to potential flaws in the treatment manipulation. The careful design and testing of the treatment and other aspects of the experiment convince us of the robustness of our findings.

2.6.2 Benchmarking PED outcomes with alternative mediation approaches

Given that PED is a novel method, comparing it with alternative mediation approaches provides important contextual insights. The core experimental design—the random manipulation of the treatment (threat communication)—allows for the application of alternative methodological approaches. By incorporating established methods, we align our findings with previous research, improving comparability. Reflecting on the feasibility of the underlying assumptions for the different designs, their limitations qua design, and the resulting implications, we benchmark our causal approach against descriptive mediation methods (Arceneaux et al. 2006; Lalonde 1986).

We analyze our experiment with two established approaches: First, the descriptive multi-equation approach following Baron and Kenny (1986) and second, the descriptive design-based implicit mediation approach, most recently described in Bullock and Green (2021). Both of these approaches can be categorized as experimental survey methods. However, they fall into the category of descriptive mediation analyses, as the mediator is not manipulated.

By far the most frequently used method of mediation analysis is the multi-equation regression method based on Baron and Kenny (1986). However, it has been pointed out in the literature that this method is prone to bias given often violated assumptions (e.g., Judd

and Kenny 1981: p. 607, Robins and Greenland 1992; Rosenbaum 1984). More precisely, conventional mediation analysis has been shown to be prone to false positives, i.e., erroneously identifying mediation effects in their absence (Bullock et al. 2010; Rosenbaum 1984). Aiming for more causality via a design-based approach, but still in the realm of descriptive mediation, the method of implicit mediation analysis was more popular in pre-1980s research and has seen renewed interest in recent policy studies (Bullock & Green 2021; Gerber & Green 2012).

The results of the multi-equation mediation approach support partial mediation through anger but no mediation through anxiety (see subsection B.4.2). In addition to the mediation effect of anger, there is also a robust and causally identified direct effect of threat communication on policy preferences in both emotion models. However, the results for the mediation effect rely on the hard-to-fulfill sequential ignorability assumption. The highly likely violation of this assumption is known to lead to wrong estimates and inference statistics with a tendency to overestimate mediation effects. In light of this, the mediating effect of anger should be interpreted with caution because the indirect mediation only has a small and marginally significant effect.

The implicit mediation approach reveals no significant mediating effect for either emotion model in the entire sample (see subsection B.4.3). However, this methodological design and analytical procedure only allow for testing full mediation, which precludes any relevant direct relationship between the treatment (threat communication) and the dependent variable (policy preferences) and thus has limited explanatory value. Although the absence of an effect in the data does not confirm the general absence of an effect, it gives an indication. Consequently, the implicit mediation model provides no evidence of full mediation through either emotion.

Based on the combined results of our different mediation approaches, we conclude that there is no substantial indirect effect mediated by anxiety or anger. Consequently, our findings do not support the hypothesis that anxiety has a mediating effect on the relationship between threat communication and increased support for security policies. Likewise, we find no evidence for the more recent hypothesis that anger mediates the positive association between threat and support for freedom.

Considering the results of the different empirical strategies in light of the fulfillment of their respective assumptions, we conclude that there is a direct negative effect of threat communication on policy preferences, i.e., perceived threat increases support for security-oriented policies, such as Smart Borders. Due to the random treatment manipulation, this effect can be interpreted causally.

2.6.3 Reflections on the mediating effect of emotions

Our descriptive and causal mediation models allow for a plethora of tests of both emotional mechanisms (anxiety and anger). The detailed measurement strategy, including (i) self-ratings by the respondents of the six core emotions and (ii) external emotion ratings based on the written essays for the experimental manipulation of the mediator, provides a nuanced view of the emotional mediation process. Our in-depth analysis underscores the greater complexity of emotional dynamics in political communication than has been acknowledged in prior research (Groenendyk 2011; Marcus 2023; Richards 2004).

Even with this detailed corpus of experimental data and efforts to trace the absence of a mediating effect back to a specific theoretical link in the mediation triangle (Figure 2.2), we cannot make sophisticated claims about why the causal mediating effect is non-existent. We cannot disentangle whether it is due to a canceling effect in the combined occurrence of emotions or a true absence of the single mediation effect of anxiety and anger. This speaks to the large literature that emphasizes the fundamental challenge of disentangling the inherently interconnected emotions of anger and anxiety (Bakker et al. 2021; Erhardt et al. 2021; Huddy et al. 2015; Lerner et al. 2015; Marcus et al. 2019).

With regard to emotions, our causal mediation approach hints toward, and suffers from, the fact that discrete emotions, as well as their absence, (neutral emotional state) cannot be perfectly manipulated. The implications of this phenomenon extend to both the empirical and the theoretical dimensions. First, with regard to the empirical dimension, our study reveals that the monotonicity assumption in a causal mediation model might be as hard to fulfill as the sequential ignorability assumption in a multi-equation model. Even with a strong study design, any method that tries to show emotions as the cause, mediator, or moderator is likely to violate necessary assumptions when the goal is to focus on

discrete emotions. One potential solution to this issue is to acknowledge the inherent in-manipulability of a single emotion. In light of this acknowledgment, several conceptual approaches are worth considering: (I) interpreting emotions as a bundle treatment rather than isolating individual effects, (II) clearly specifying the expected theoretical role of the emotion under study within a broader emotional context, (III) comparing one emotion to another rather than to a neutral baseline, given that emotional neutrality is difficult to achieve, or (IV) analyzing emotions as part of a multidimensional interaction, involving at least the six basic emotions (six-way interaction), thereby shifting the focus from discrete emotions to dimensions of emotions. The main limitation of the initial approaches (I–III) concerns their explainability. Although statistically sound, they don't make it easier to distinguish between a potential canceling effect and an absent effect. Unfortunately, the sample size required for the latter approach (IV) would be enormous.

Second, with regard to the theoretical dimension, our findings prompt a reconsideration of how emotions are conceptualized and studied, acknowledging that discrete emotions can not be isolated. This plea represents a progression from earlier theoretical frameworks—such as standard appraisal theories, which predict a single emotional response to a threat—toward AIT and subsequent efforts, which predict multiple emotional responses to a threat, thereby calling for a more comprehensive and detailed model. In light of the empirical findings, there is a need to refine the current state of theories about discrete emotions to account for greater complexity and contextual variation: Do we expect the presence of a particular emotion, say anger, as one of several in the emotion conglomerate to affect policy preferences? Is it necessary for this emotion to be the strongest in the emotion conglomerate, and must it be the most distinct? Alternatively, do all other emotions need to be present at no more than a certain level, or do weaker, yet more distinct emotions also have an influence? At what level of an emotion can a person be described as emotionally neutral?

This empirical challenge is not new to the literature, but has been made more or less explicit in the various studies. Some deal with the in-manipulability of discrete emotions by stating that related (but non-targeted) emotions are only manipulated at a minimal level (e.g., Lerner et al. 2003; Strack et al. 1985; Tiedens and Linton 2001). Others see the

discrete emotion manipulation as successful if the manipulated emotion is triggered to a (at least slightly) stronger degree than the other emotions (even when the other emotions are quite dominant) (e.g., Small and Lerner 2008). Again others test the effect of one emotion only while statistically controlling for all other emotions observed (Jost 2019). Some notable authors reflect on the nuances of discrete emotion theory and their limits more clearly in their theoretical framework, stating that they expect emotions to work as a correlated response in varying compositions (Marcus 2021; Marcus et al. 2017; D. A. Miller et al. 2009; Wagner 2014).

We are aware that the discussed methodological demands to study emotions are challenging, and perhaps no one will fully succeed. But even when sticking to the prominent descriptive mediation design or any attempts to study causality, researchers should reflect on how they manipulate and measure emotions, the methodological restrictions they pose to discrete emotions, and the (un-)fulfillment of the assumptions needed in the methodological approaches used. As these methodological assumptions affect the uncertainty of their outcomes, they should be taken into account in the theoretical framework based on which the role of emotions in political communication is studied.

2.7 Conclusion

The objective of this study was to examine whether emotions have a mediating effect on the well-documented relationship between threat communication and policy preferences. We investigated the two emotions anxiety and anger as the most relevant emotions associated with threat. While this key mediation mechanism has been theorized in the recent literature, it lacks sufficient empirical testing to generate causal validity. In this study, we addressed this concern by applying a novel causal mediation approach, the parallel encouragement design (PED), in a survey experiment among a population-matching sample of the German population. This enabled us to go beyond previous mediation analyses in terms of causal identification. In light of the assumptions underlying this method, we considered its level of insight and uncertainty and compared the results with those obtained using other mediation methods.

We found no evidence that emotions act as a mediator between threat communication and policy preferences. This result is robust across different dependent variable and model specifications. When analyzing the relationship using descriptive mediation approaches, we reached the same conclusion: there is no evidence of a mediating effect of emotions. Accordingly, our results suggest that societal manipulation through strategic political communication is limited—at least in the context studied here.

Although the absence of a mediating effect of emotions on policy preferences seems at odds with the majority of the literature at first glance, an intriguing possibility is that this outcome is neither rare nor new. Anecdotal evidence suggests that this imbalance may result from the disproportionate visibility of peer-reviewed, high-ranking publications reporting positive findings in contrast to publications reporting null results. This assumption is supported by the considerable number of experimental null findings regarding emotions as mediators that is documented in books and dissertations (Küntzler 2021; Masch 2020), in pre-prints and working papers (Nguyen 2019), or in articles in which the null finding regarding emotions as mediators is merely a side outcome (Halperin et al. 2009) or that are published in other disciplines (Müller et al. 2022). Hence, it is plausible that this very asymmetry in publications contributes to the relatively widespread contention that strategic threat communication may influence individuals' policy preferences by triggering certain emotions: Based on the literature, we can draw sharp inferences when mediation occurs but are left wondering when it does not. Consequently, we dare to conclude that our results corroborate—at least in part—previous research that uses experimental designs.

In summary, this study contributes to our understanding of the role of emotions in politics. It expands current knowledge on the limitations of emotions in shaping policy preferences. This also provides a welcome counterpoint to the dominant narrative in current research, which tends to depict society as heavily driven by emotion in the context of populism and radical voting behavior. In our study, it is primarily the communicated threat itself that influences public policy preferences. Based on this, we re-emphasize the role of topics and the diversity of topics that are addressed in political and social debates. At the same time, our findings call for more, not less, research on the role of emotions

in political communication, and for developing more sophisticated theories and reflective methodological applications to enhance our understanding of "the mediation myth" (Kline 2015) in political communication.

2.8 Additional Information

Ethics Information. This research complies with the ethical regulations for research carried out with human participants. The design was reviewed and approved by the Ethics Commission of the University of Mannheim (EK 44/2023). Informed consent was obtained from all respondents before participation. At the end of the pre-studies and main surveys, all participants underwent a debriefing. Even though the participants were informed during the survey that the treatment, the fact sheet, and the excerpt from a speech in the *Bundestag* were hypothetical, it was important to emphasize this again in a detailed debriefing at the end of the study. We estimate the likelihood of participants misperceiving the material as originating from a real politician, speech, or Bundestag session to be minimal. Participants received equal compensation for their participation.

Funding. This research is financially supported by the Open Science Grant of the University of Mannheim. The funder has/had no role in the study design, data collection and analysis, decision to publish, or preparation of the manuscript.

Declaration of authorship. Both authors, Felix Jäger and Sandra N. Morgenstern contributed equally to this paper/chapter "Do emotions mediate the impact of threat on individuals' policy preferences? Evidence from a parallel encouragement experiment.".

Chapter 3

Support for Civil Liberties under Affective Polarization

Abstract

While citizens' support for abstract civil liberties always has been high, more detailed research on these attitudes has revealed that this support is not universal as soon as requirements or necessary trade-offs are introduced. Motivated by this observation, I investigate the relationship between citizens' preferences for specific polices of civil liberties and the supply side of such proposals, namely political candidates and their respective parties. I combine the concept of affective polarization with the theory of politically motivated reasoning to argue that stronger affective polarization increases the probability that citizens give up their policy position on civil liberties. I conducted an original two-step conjoint survey experiment in nine European countries with a total of N=11,894. Results from the first step of the experiment show that citizens have a strong preference for candidates that hold liberal positions of civil liberties. In the second step, party-affiliations of hypothetical candidates are revealed. The results of the second step reveal that citizens who are strongly polarized for the shown party dyad are 35 percentage points more likely than weakly polarized citizens to withdraw their vote for an out-party candidate who holds preferred policy positions. However, even strongly polarized citizens still indicate that these out-party candidates should be allowed to work with other politicians and should be allowed to speak in public about these issues. The chapter advances our understanding of citizens' support for civil liberties and the effect of affective polarization on these rights in different party-systems.

Keywords: civil liberties, policy preferences, affective polarization, survey experiment

3.1 Introduction

While citizens' support for civil liberties in general has always been high, once broken down into specific rights or policies, the support by citizens already dwindles (Selvin & Hagstrom 1960; Sullivan & Hendriks 2009). Citizens also vary in their support for civil liberties when asked whether these rights should be applied to specific (out-)groups (Marcus et al. 1995; Zalkind 1975). Research around this issue has shifted from the pre-9/11 era, when the discussion revolved around striking a balance between individual security and extending civil liberties to disfavored groups, to a situation where citizens in the post-9/11 era are being asked to trade some of their civil liberties for the sake of national security (Davis & Silver 2004). In the case of the U.S., instead of simply considering whether their existing freedoms should be extended to groups such as Muslim Americans, the American public as a whole is now being asked to give up some of its own civil liberties in the interest of national security. For example, due to the "Patriot act" several surveillance measures where allowed that cut into privacy rights (Etzioni 2005).

Studying citizens' attitudes towards civil liberties is very necessary since these rights are not merely abstract principles but the very foundations of democratic states (O'Cinneide 2018). For democracy to remain robust, citizens must hold clear and stable views on the protection of core freedoms such as speech, assembly, and equal treatment under the law (Dahl 1998; Welzel & Inglehart 2009). While citizens attitudes towards civil liberties should be crystallized, support for specific civil liberties policies can be changed (Tesler 2015), and might be volatile (Freeder et al. 2019). Ambivalence or inconsistency in public support for these policies creates space for political actors to challenge or erode them (M. J. Cohen et al. 2023). Understanding how citizens evaluate civil liberties policies is therefore crucial not only for assessing the strength of democratic norms in the present, but also for identifying risks of democratic backsliding in contexts where support for these freedoms is fragile or conditional (Welzel 2007). This study examines these attitudes in the context of affective polarization, to extend our understanding of both the resilience and the vulnerability of contemporary democracies.

In this chapter, I investigate the relationship between citizens' preferences for specific

policies of civil liberties and the supply side of such proposals, namely politicians and their respective parties. Is the support for specific policies unstable when citizens learn about the policy proposing candidate and their party? Or do citizens stick to their preferences even in the light of party cues? What happens when policy proposals that match citizens' preferences are proposed by a disliked out-party? With the rise of affective polarization, the "unwilling[ness] to socialize across party lines, or even to partner with opponents in a variety of other activities" (Iyengar et al. 2019: p. 2), a stable support seems unlikely, but it is still an open question.

I combine the concept of affective polarization with the theory of politically motivated reasoning (Taber & Lodge 2006) to argue that stronger affective polarization increases the probability that citizens give up their policy position on civil liberties. This extends beyond the concept of party cues for which only the in-party has been considered relevant (Bisgaard & Slothuus 2018). Furthermore, I argue that highly polarized citizens are not only more likely to adapt opposing policy positions, but are also in favor of restricting democratic principles for out-party candidates.

I conducted an original pre-registered[1] two-step survey experiment in nine European countries with a total N=11,894. First, respondents were given a conjoint table with two candidates, each proposing policies related to civil liberties. After indicating which candidate and related policy bundle they prefer, in the second step, the same conjoint table was shown again with the addition of the party affiliation of the policy proposing candidate. The respondent's in-party was assigned to the unselected candidate. A random out-party was assigned to the candidate selected by the respondent in the first step. Respondents then were asked whether they wanted to stick to their initial choice or wanted to change it to the other candidate. Respondents were further asked whether the candidates should be allowed to speak in public about the policies and whether the candidates should work together with other candidates on these policy issues. These two measures represent important democratic principles such as the freedom of speech as well as the need to cooperate and search for compromise. Together with the central measure, a nuanced picture of the effect of affective polarization on different democratic norms can be drawn.

[1] https://osf.io/hg9sd/?view_only=9636c160979d478586f578eadea9a526

Results show that affective polarization heavily influences citizens' willingness to withdraw their choice from a candidate with preferred positions on civil liberties. The first step of the experiment establishes that citizens have a strong preference for candidates that hold liberal positions of civil liberties. The second step reveals that citizens who are strongly polarized for the shown party dyad are very willing to withdraw their previously indicated preference. They are 35 percentage points more likely than weakly polarized citizens to withdraw their vote for an out-party candidate who holds preferred policy positions. However, even among strongly polarized citizens the vast majority indicates that these out-party candidates should be allowed to work with other politicians and should be allowed to speak in public about these issues.

This chapter makes several contributions. First, it broadens the perspective on current issues concerning civil liberties by embedding them in a comparative trade-off scenario. Second, it sheds new light onto the debate about the political consequences of affective polarization, considering multiple European countries and their different party-systems: the results show that the willingness to give up support for civil liberties dependent on affective polarization is very similar across different countries. Third, the study contributes to the literature about democratic backsliding, extending studies like Graham and Svolik (2020) by investigating how citizens' are willing to take back their already indicated support for civil liberties. This goes beyond previous studies, which for example "only" observe that citizens value their partisanship more strongly than democratic values. The study also shows how citizens deal with the dilemma when politicians from "the wrong side" (out-party) propose preferred policy positions. These results should make us cautious about the stability of liberal democratic institutions in highly polarized societies. Lastly, the results rest on a original experimental design following latest developments of politically motivated reasoning. With this two-step approach, preferences are determined without the interference of party or ideological cues. These cues are only introduced in the second step, which allows to identify the effect of affective polarization. Accordingly, the new experimental design overcomes the dominance of party cues in experimental cues.

3.2 Theory

In this chapter, civil liberties are not investigated as vague, ideal rights, but instead are operationalized through specific policies. Policies are proposed by politicians or parties or during election campaigns by political candidates. To understand whether citizens support these policies and candidates, I rely on the theory of motivated reasoning and source cues or party cues. These cues indicate the sender of a message, which can come from an in-party or out-party. The positive and negative feelings towards these parties are summarized as affective polarization, which I expect to influence the support for civil liberties.

In order to understand citizens' support for these policies and candidates, I draw on the theory of motivated reasoning (Epley & Gilovich 2016; Kunda 1990). Motivated reasoning is not clearly defined, but "the common working conception is that it is a mode of reasoning in which the person's goal is to reach a particular, politically congenial conclusion when reasoning" (Tappin et al. 2020: p. 3). Applied to the case of policy support or aversion, motivated reasoning can help to explain why "[c]itizens may support (oppose) policies that they would otherwise oppose (support) in the absence of an endorsement from a political party—this is due in large part to what is called partisan motivated reasoning where individuals interpret information through the lens of their party commitment" (Bolsen et al. 2014: p. 235).

A key element of motivated reasoning are source cues or party cues. Party cues play a pivotal role in shaping political attitudes and behavior, acting as a fundamental element in modern political systems. One of the core assumptions of the literature on public opinion is that to make sense of the political competition voters rely on elite cues (Kahan 2013a; Lodge & Taber 2013; Zaller 1992). These cues add trusted sources, like political parties, to messages or signals that individuals receive. The 'Michigan model' posits that partisanship serves as a perceptual screen that colors political attitudes (Campbell et al. 1960). This means that individuals tend to see the world through the lens of their partisan identity, relying on cues from their affiliated party to navigate the landscape of politics (Kosmidis 2020).

One important aspect of party cues is their role as heuristic shortcuts. For citizens

which can be overwhelmed by the volume of political information, the use of party cues can serve as mental or cognitive shortcut. These shortcuts can be used to align votes and policy preferences with core values and interests. This allows citizens to make informed decisions without delving into the details of each issue. It also helps them avoid being swayed by arbitrary issue frames, ensuring that their choices align with their party's positions (Toff & Suhay 2019).

However, it's essential to acknowledge a counter-perspective that views party cues not merely as heuristic shortcuts but as symbols of social identity. Some scholars argue that party cues are influential because they serve as proxies for the party as a social group, representing an individual's identity and affiliation rather than a rational choice based on policy alignment (Huddy et al. 2015). Achen and Bartels (2017) contend that social identities and partisan loyalties play a significant role in shaping citizens' voting decisions and the policy preferences that underlie the concept of responsive government. This perspective suggests that individuals may prioritize party loyalty and social identity over policy specifics when making political decisions.

Affective polarization goes beyond individual party cues, setting citizens' perceptions of in-party and out-party into relationship. The broad term "polarization" covers the polarization along the ideological dimension, partisan alignment or affective polarization (Jost et al. 2022). Within this chapter the focus lies on affective polarization which can be defined as citizens animosity towards opposing parties, which makes them "unwilling to socialize across party lines, or even to partner with opponents in a variety of other activities" (Iyengar et al. 2019: p. 2). While this definition includes both "horizontal" polarisation—how citizens view each other, and "vertical" polarization—how citizens view and approach the political system (Berntzen et al. 2024), the focus of this chapter is on the latter.

How affective polarization affects policy preferences, i.e. in this chapter the preferences for policies in the realm of civil liberties, is visualized in Figure 3.1. Following a general model of politically motivated reasoning, citizens hold some prior preferences. When confronted with new evidence, this evidence is evaluated through general political predispositions, which leads to an updated preference (Kahan 2015a). In Figure 3.1, gen-

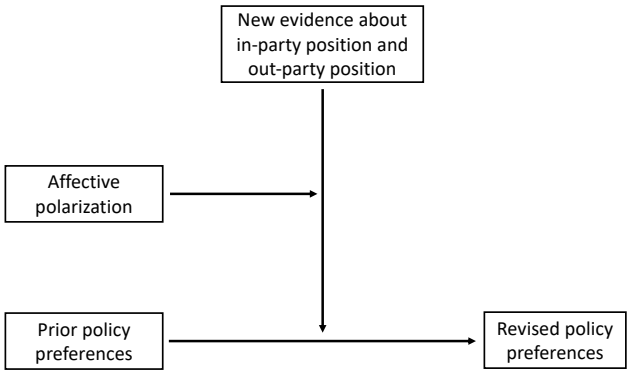


Figure 3.1: Causal graph based on a generalized model for motivated reasoning (Kahan 2015a) with the inclusion of affective polarization.

eral preferences are specified as policy preferences. When citizens are confronted with new information or evidence about these policies, e.g., the position of parties during an election campaign, they will reevaluate their prior preferences and adapt them accordingly. In contrast to party cues, policy cues provide information about the position of a party or candidate. They can be evaluated by citizens to see whether the position of a candidate matches their own position. How this new evidence is evaluated and weighted depends not only on a single party cue, but on multiple party cues and how they are seen in contrast to each other. This is when affective polarization becomes relevant, which moderates these cues providing a positive bias in favor of one's own party (in-party), coupled with a dislike of rival parties (out-party) (Abramowitz & Webster 2018).

3.2.1 Effects of affective polarization

Affectively polarized citizens' are less willing to make compromises, avoid the contact to out-group partisans and discrimination towards political opponents (Iyengar et al. 2018). The consequences of affective polarization do not only concern social interaction and discrimination among citizens (Stoetzer et al. 2023), but also reach into the political world. Polarization leads to an erosion of democratic norms (Kingzette et al. 2021) and polarized citizens rather stick to their preferred candidate or party even when they act against

democratic rules or norms (Graham & Svolik 2020; Svolik 2019).

So far, "existing literature has generally simply asserted that affective polarization has downstream consequences for political decisions, with scant attention paid to the theoretical process by which this might happen and with little supporting empirical evidence" (Broockman et al. 2022: p. 1). An expectation which has been challenged by Broockman et al. (2022) who find no experimental evidence of affective polarization on several political consequences in the U.S. Their finding runs against the expectations scientists held for the last decade. The question arises if this finding is generalizable and whether there are no political consequences of affective polarization in other countries as well. For example, the strong polarization towards radical right parties in many European countries (Gidron et al. 2023) offers a more nuanced case than the two-party system of the U.S. Moderate citizens or main stream voters can be highly polarized towards right-wing parties, but only little polarized towards other parties at the center of the spectrum. This example illustrates why polarization is understood and operationalized as dyad of individuals' in-party and a single out-party. In a dyad which is strongly polarized, citizens might adopt the policy position of their preferred party (Iyengar et al. 2019: p. 142). In contrast, in a low polarized dyad, citizens rather make their candidate choice based on their issue preferences and do deviate from their otherwise preferred candidates' or parties' stance.

3.2.2 Why citizens should keep their policy positions

When citizens learn about the policy stances of politicians, they are confronted with a party and policy cue. Both can be evaluated and compared with citizens prior policy preferences and general political predispositions. When the out-party of a citizens matches the policy-preferences and the in-party does not, citizens are confronted with two options: either, giving up their policy positions and adopting the position of their in-party or staying with their policy positions and disagreeing with their in-party.

How citizens evaluate this trade-off between party and policy preference depends on several factors. Citizens who are ambivalent partisans should be rather affected by policy cues then by party cues (Steenbergen 2020). The weaker ties between parties and voters in current multi-party systems also leads to more electoral volatility (Oesch & Rennwald

2018; Oshri et al. 2022) which strengthens the importance of policy cues. Empirical evidence has also shown that citizens "do not reflexively oppose the positions of the other party" (Fowler & Howell 2023: p. 24). Giving up ones policy position can also be costly for citizens when their policy positions are important for them. When these costs become to large, citizens are expected to stick to their policy preferences.

When it comes to the evaluation of policies, the party over policy hypothesis states that people are more in favor of a policy proposal when it is presented by the in-party (G. L. Cohen 2003). However, this hypothesis has been challenged (e.g., by Bullock (2011) and Nicholson (2011)). For example, Chou et al. (2021) show for the German case that support for the right-wing party *Alternative für Deutschland (AfD)* is highly responsive to the party's issue positioning. This effect persists among AfD voters even when a potential AfD candidate adopts a moderately less restrictive stance on immigration. Furthermore, Lelkes (2021) finds that extreme policy stances of a candidate have a stronger effect on citizens support for that candidate than learning about the candidates party.

I argue that the party over policy hypothesis should be reevaluated for the case of civil liberties under the perspective of affective polarization. First, policies around civil liberties have the potential to be extreme as they can cut directly into citizens' fundamental rights. This theoretically makes them important enough for citizens to base their choices on them. Second, it is expect that people have strong opinions on civil liberties which are core democratic values. Third, since affective polarization does not only concern in-party cues, but also the relationship to an out-party, more weight is given to the party-component of the party over policy hypothesis. Whether affective polarization can outweigh policy cues, will be examined.

3.2.3 Why citizens should adopt policy positions of their in-party

According to Kahan (2015b) one goal of politically motivated reasoning is identity protection. People want to form beliefs that align with their affinity group to maintain their status within their group. Social identity theory states that people categorize others into in-groups and out-groups (Tajfel 1981). This division should be especially strong for "[p]artisans with high levels of animus toward the other party [who] are more motivated

to distinguish themselves from their political opponents. They do so by taking positions on new issues that differ from the other (disliked) party and match those of their own preferred party" (Druckman et al. 2021). Partisans further change their existing policy preferences when are informed about which policies the in- or out-party supports (Barber & Pope 2019; G. L. Cohen 2003). When citizens are motivated to defend their partisan identity, party cues lead to a selective information process (e.g., Druckman et al. 2013; Slothuus and de Vreese 2010).

Nicholson (2012) perfectly summarizes the two reasons why citizens might adopt the policy position of their in-party:

> "If an in-party candidate endorses a policy but the voter holds a contrary opinion, the voter might change her position in order to align her views with the in-party. On the other hand, if the voter holds the same position as the out-party candidate, the voter might question his initial opinion, give it greater consideration, and possibly switch positions. Thus, out-party candidate cues can induce a partisan to hold a contrary position, a phenomenon known as opinion polarization." (Nicholson 2012: p. 52)

Affective polarization might foster citizens' willingness to adopt the policy position of their in-party through two potential mechanism: divergence and desensitization (Broockman et al. 2022; Little et al. 2022). Divergence refers to the idea that affective polarization increases party loyalty. Even though citizens do not like the policy position of their in-party, through higher party loyalty they keep supporting that party. The other alternative would be that citizens revise the policy and interpret it differently to align their views with the in-party. Desensitization refers to the idea that affective polarization weakens voters' responses to information about the incumbent's actions. These two mechanisms may operate independently or in combination, leading to the same hypothesis:

Hypothesis 1: The higher the affective polarization of citizens, the more likely they are to give up their preferences for (or against) civil liberties when the preferred position is proposed by an out-party candidate.

3.2.4 Affective polarization in multi-party systems

Most empirical studies on the political consequences of affective polarization are centered on the U.S., in whose two-party system the manifestation of affective polarization is rather clear. The in-group and out-group are equal to the two parties, Democrats and Republicans. However, several studies show that affective polarization across party lines does not only concern the U.S., but also European democracies (Gidron et al. 2020; Harteveld et al. 2022; Kekkonen et al. 2022; Reiljan 2020; Wagner 2021). Many of these countries do have a multi-party system in which affective polarization can play out differently. Due to multiple parties competing for votes, citizens can choose between more than two parties. Chances are they are not equally polarized toward all of these options. (One exception might be advocates of extreme parties, who might have fewer or no real alternative options than advocates of centrist parties.) On average, the political consequences of affective polarization in multi-party systems are expected to be less severe since citizens have more than one alternative party to choose from when it comes to voting. For most party-pairs, affective polarization should not be that high, especially for parties that are ideologically close to each other. At the same time, affective polarization for a dyad of two parties at opposing ends of the ideological spectrum could be more extreme than in the U.S., due to a potentially even stronger distance between the two parties.

Compared to the two-party system in the United States, multi-party systems differ in two key aspects relevant to the potential effects of affective polarization. First, coalition governments are often necessary because no single party typically secures a majority. Second, a greater number of parties expands the range of political positions along the centrist–extremist spectrum. Both aspects are likely to shape the dynamics of affective polarization, which I conceptualize as a mediator in the following two hypotheses.

According to Fortunato and Stevenson (2013), citizens use a coalition heuristic to infer that co-governing parties share similar ideologies. This coalition heuristic may increase partisans' positive feelings towards co-governing out-parties "by prompting them to perceive these parties as sharing the partisans' own policy views, beyond what we would expect based on objective measures of party position" (Gidron et al. 2023). Partisans also attribute an affective bonus to co-governing partisans (coalition partners) (Bassan-Nygate

& Weiss 2022). This bonus for coalition parties should also decrease the levels of affective polarization, for example through a signaling effect that these parties are willing to work together and are sharing some goals. Therefore, I expect that affective polarization acts as a mediator between the coalitions status of two policy proposing parties and citizens' support for civil liberties.

Hypothesis 2: The relationship between the coalition status of two policy proposing parties and citizens' support for civil liberties is mediated by affective polarization.

In multiparty systems, particularly across Europe, radical-right parties occupy a unique position in the affective landscape of partisanship. These parties are not just uniquely disliked, but they exhibit higher levels of animosity against mainstream parties (Vanagt et al. 2024). This "radical right exception" (Gidron et al. 2023; Harteveld 2021) reflects a broad societal aversion that goes beyond mere ideological disagreement. Such parties often stand in stark contrast to liberal democratic norms and are frequently associated with authoritarian rhetoric, anti-immigrant stances, and nationalist agendas. Consequently, when an extreme party, particularly on the radical right, proposes a policy, it is not merely the policy content but the identity of the proposer that evokes strong negative reactions among voters. Centrist voters, who, when faced with cues from an ideologically distant and disliked out-party, may experience intensified affective polarization. Thus, the presence of an extreme party in a party dyad is likely to exacerbate affective polarization, particularly when the out-party is the radical right.

Research suggests that they effect of party cues has some limits in its influence on public opinion, but their effect becomes clear when they come from extreme and strongly disliked parties Nicholson (2011). This indicates that the identity of the policy proposer can matter significantly under certain conditions. However, affective polarization is a broader concept than simple cue responsiveness. It encompasses not only reactions to out-parties, but also the emotional attachment to one's in-party and the resulting affective distance between party camps. In the European context, affective polarization appears particularly asymmetrical. Citizens tend to express much stronger negative feelings toward right-wing parties than would be expected based on ideological or policy differences alone (Gidron et al. 2023). This disproportionate aversion, especially among those who do not identify

with these parties, likely intensifies affective polarization when such parties propose policies. As a result, citizens may become less willing to support policy measures, including those protecting civil liberties, simply because they originate from a highly disliked out-party. I expect that affective polarization acts as a mediator between the policy-proposing out-party being an extreme party (or not) and citizens' support for civil liberties.

Hypothesis 3: The relationship between the policy-proposing out-party being an extreme party (or not) and citizens' support for civil liberties is mediated by affective polarization.

3.3 Method

Sample. An original pre-registered cross-country survey was conducted in nine European countries (Czech, Germany, Ireland, Italy, Netherlands, Poland, Spain, Sweden, United Kingdom) with a total sample size of N=11,894.[2] The data was collected between January and March 2025.[3] For most countries, the sample size ranges between 1500 and 1600 respondents, with the exception of Ireland and Poland, with about 700 respondents each (see Table C.2 for descriptive statistics and Table C.3 for descriptive statistics by each country).[4] Respondents have been recruited by the survey company Dynata. Translations from English into required languages were provided by professional translators, who were instructed about the scientific idea of items where necessary.

Measurement affective polarization. To operationalize affective polarization I rely on a widely used measure, the differences in the party-feeling thermometer (Gidron et al. 2022). Based on the feeling thermometer the strength of affective polarization can be calculated. I follow the approach of Gidron et al. (2023) and investigate the affective

[2]The study obtained positive advice from University of Mannheim Ethics Commission (IRB statement EK Mannheim 43/2024).

[3]Two pre-tests have been conducted in the UK (March 2024, N=1,001) and Germany (June & July 2024, N=1,004). Insights from the pre-test lead to small adoptions of the policy wording.

[4]This slightly deviates from the pre-registration plan. Originally, the data collection should encompass N=2,000 per country. Due to difficulties in acquiring the sample in every country, we had to relax initially set up quotas (gender (2-cat), age (5-cat), education (2-cat) and NUTS-2) and reduce the targeted sample size to N=1,600.

polarization between individual party-pairs or party-dyads. This party-dyad measure fits to the following experimental design in which respondents have to choose between two candidates. The feeling thermometer is measured for each major party in each studied country.[5] I focus on partisan affect between parties or candidates of parties (for a comparison between affect towards parties and supporters of these parties see, e.g., Druckman and Levendusky (2019) and Kekkonen et al. (2022)). Based on the indicated feelings, parties are classified as in-party (most positive feeling) and out-parties (all other parties except the most-liked party) for each respondent. Affective polarization for a party-dyad is then calculated as

$$AffectivePolarization = Feeling_{Inparty} - Feeling_{Outparty}$$

However, identifying a respondents' in-party in a multi-party system is not always clear, since they could have equally positive feelings towards multiple parties (for different attempts to solve this issue see, e.g., Kekkonen et al. 2022; Reiljan 2020; Wagner 2021). In case the highest feeling thermometer score is equally high for more than one party, I use the stated vote choice from the last election to decide which party to classify as an in-party. If no party with the highest rating was selected for the last vote choice, one of the highest rated parties is selected at random. In a robustness analysis, those without a clear in-party are excluded (Table C.9).

Experimental setup. To test the hypotheses in the framework of politically motivated reasoning I utilize a two-step experimental design. In a first step, respondents only see policy positions, in the second step party cues are additionally shown. This design is derived from the motivated reasoning literature according to which politically motivated reasoning has to be separated from prior believes in experimental designs (Kahan 2015b; Tappin et al. 2020). The effect of ideology or party cues in experiments can be distorted through prior believes about an issue. To get a clearer understanding of the politically motivated reasoning controlling for these prior believes should isolate the direct effect of political ideology (Tappin et al. 2021) and in the given case the effect of affective polarization.

[5] See subsection C.1.4 for an overview of studied countries and parties. Parties were included on which one of the following three selection rules applied: being in government; being in parliament with at least 5% of votes; being above 5% in current polls. Evaluation happened on November 12, 2024.

In the first step, respondents see a conjoint with three policy positions and three personal attributes of two candidates (Hainmueller et al. 2015). The order of the dimensions within the block of policies and within the block of personal attributes is randomized (see L. Rudolph et al. 2024 for a discussion of item ordering in conjoint experiments). They are asked to choose between the two candidates and answer few more questions about their preferences concerning these candidates (described in section about dependent variables).

In the second step the party affiliation of the two candidates who proposed the two policy bundles are revealed. This design and assignment of parties is not fully random. Instead, the party of the candidate selected in the first step is assigned with a random out-party. The party behind the not selected candidate is the in-party of the respondent. To estimate the effect of affective polarization, the in-party always has to be included since it is required for the measure: the difference between the in-party and an out-party. The in-party is always assigned to the not chosen candidate. This provides respondents with an incentive to change their candidate choice. They are confronted with the dilemma between preferred policy preferences and party-like and party-dislike/affective polarization. In a neutral comparison group, instead of a party affiliation the candidate is labeled as independent.

After the reveal the dependent variables are measured again. For example in case of the first dependent variable, respondents get the chance to change their candidate choice or stick with their initial choice.

This two-step design allows to first identify the respondents preferences without providing any source cues. Any biases that can come from source cues are avoided, concerning both the in-party and out-parties. For example, when partisans are asked to evaluate policy trade-offs proposed by opposing parties, they tend to judge the negative consequences or side effects of a policy as intentionally created by the out-party due to their low level of trust in it (Goya-Tocchetto et al. 2022). The employed design also avoids biases towards the in-party. First, in conjoint designs, the change of one attribute (here party identification) can also shift the perception of other attributes. This would introduce an unwanted hidden treatment (Fowler & Howell 2023). Second, providing the party cue together with the policy information inherits the danger that respondents view the policy

through the party lens and endorse the policy only because of the party cue (Tappin et al. 2020).

The proposed design has two more advantages over a vignette study. First, the provision of policy position of two candidates at the same time solves the problem that respondents might expect that their preferred party takes an opposing position to their out-party (Fowler & Howell 2023). Second, the evaluation of the revealed party affiliation of the candidates matches the process of attitude change based on polarization which is a conscious process (Nicholson 2012).

Operationalization of civil liberties. To operationalize citizens preferences for civil liberties, I rely on specific civil liberties policies. As civil liberties constitute an important pillar of democracies, citizens' should have a clear position on them. Contrary, *policies* around civil liberties are usually not very salient. This makes the adoption of policy positions once a party cue is given more likely in comparison to a salient issue like the prevention of climate-change related policies (Boudreau & MacKenzie 2014). If respondents do stick to their initial policy choice, affective polarization should also not apply to more salient policy issues.

Civil liberties encompass a broad set of rights, including freedom of expression and thought, privacy and personal autonomy, the right to a fair trial, equal protection under the law, and political participation. Each of these domains is shaped by multiple policies that could, in principle, be studied. See for example Braley et al. (2023) and Selvin and Hagstrom (1960) who study a wide range of policies. In this study, I focus on two policies that speak to the first two domains: freedom of expression and privacy rights. I selected these because restrictions in these areas are particularly tangible. They directly shape citizens' everyday experiences, from the information they can access and share to the ways their personal data is protected. By contrast, other domains such as fair trial rights or equal protection, while equally important, often manifest in less immediate or less visible ways for the broader public. Concentrating on freedom of expression and privacy therefore allows for a clear and relatable examination of how civil liberties restrictions are perceived, which in turn strengthens the interpretability of the treatment effects in this study.

Table 3.1 shows the different dimensions of the conjoint table: civil liberties policy

positions and candidate characteristics. The first policy "Security" concerns the surveillance of individual communication and whether citizens support or oppose such measures. This directly interferes with general privacy rights. The second policy "Media" relates to the freedom of the press the question of whether the state should have the authority to restrict media content. The last policy "National service" does not strictly fall under the domain of civil liberties. However, mandating a period of national service—whether civil or military—still curtails individual freedom. Unlike restrictions on privacy or press freedom, this intrusion is more limited: it is temporary, occurs only once in a lifetime, and does not permanently constrain citizens' rights. Precisely because it resembles the other two policies in restricting personal autonomy, but in a narrower scope, it serves as a useful point of comparison when evaluating how citizens prioritize different dimensions of freedom. Following Lehrer et al. (2024), the candidate characteristics are designed to provide context to the profiles and to capture a broad spectrum of potential candidate backgrounds.

Table 3.1: Policy proposals and candidate characteristics. Party ID is only shown in the second step of the experiment.

Policy Area / Characteristics	Content
Security	The state should be able to do surveillance of the personal communications of the general public.
	The state should not be able to do surveillance of the personal communications of the general public.
Media	The state should be able to restrict the media.
	The state should not be able to restrict the media.
National service	In favor of a year of national service.
	Against a year of national service.
Gender of the candidate	female; male
Age of the candidate	38 years; 56 years; 74 years
Occupation of the candidate	employee; lawyer; entrepreneur; politician; activist
Party ID	Dependent on country, see Table C.1 + Independent.

Dependent variables. To measure the willingness of citizens to support or deviate

from the candidate with preferred policy positions concerning civil liberties, three measures are being used. The three variables are measured twice throughout the experiment: In the first step of the experiment, in which only the policies and candidate characteristics are shown and in the second step, after the party identifications of the candidates are revealed. The first measure establishes a base line and allows to identify the preferred candidate. The second measurement is used to capture deviations resulting from making the two party affiliations visible.

The first variable measures which candidate citizens prefer to vote for. The second variable measures whether the candidate with the preferred policy bundle (who is assigned with an out-party in the second step) should work together with other politicians on these issues. The third variable measures whether the candidate with the preferred policy bundle should be allowed to speak in public about these issues.

In the second step of the experiment, after the party reveal, respondents are asked whether they want to change their candidate choice. They are then asked whether the candidate should cooperate with other politicians on these issues. Finally, they are asked whether their initially selected candidate should be allowed to speak in public about these issues.

These three measures can be considered as a three-step scale which indicates different strength of commitment to citizens' preferences towards civil liberties and democratic values. Voting for a candidate represents the strongest commitment to the selected candidate with her proposed civil liberties policies. Therefore, a switch to the other candidate (not selected in step 1; got assigned the in-party) is the most likely case (Boudreau & MacKenzie 2014) among the three variables when affective polarization influences the respondents choice since they would not like to make that commitment. However, reminding respondents of their first answer and asking them if they would be willing to change is a format which could lead to bias in both possible directions. First, reminding respondents of their previous choice could lead to bias toward consistency. This makes it less likely that respondents change their candidate choice in the second step of the experiment. Second, reminding respondents of their answer could lead them to rethink their answer and whether it was "correct". The design is still used as "switching" is closed to the

theoretical mechanism. To still avoid this issue in some regards, 10% of respondents saw the neutral formulation—which candidate they want to chose—without mentioning their prior choice. This is the same question formulation as used in step 1 of the experiment.

Supporting that a candidate should work together with other candidates and find compromises shows commitment to the indicated candidate to a lower degree. Allowing a candidate to speak in public is a very low threshold and does not demand a lot from citizens to agree to this. When respondents decide to change their candidate choice, they should still be in favor to search for compromise, since they were in favor of the policy bundle proposed by the first-selected candidate. They should also be in favor of letting this politician speak publicly about these issues, because of their overlap in content and the general democratic principle of freedom of speech. These two variables can be considered as least-likely case for affective polarization leading to a reversal of the original decision to grant these candidates the two rights.

The three variable (change candidate choice, first-selected candidate should be allowed to work with others, first-selected candidate should be allowed to speak in public) have different implications for democratic values. In a democracy, citizens are expected to hold parties accountable by rewarding them for preferred policies and punishing them for disliked ones. If citizens fail to punish parties for proposing disliked policies, then these parties are not being held accountable for their actions. The second variable taps into the concept of the willingness to compromise. Searching and agreeing to compromise is a fundamental element of democracies. This also gives citizens' the chance that their preferred policies are represented by some other candidates. The last variable, allowing a candidate to speak in public, concerns the democratic principle of freedom of speech. Therefore, citizens' should have strong reservations to indicate that a candidate should not be allowed to speak in public.

Analysis and model estimation. Since data are collected in multiple countries, the data structure is clustered. In particular, observations are clustered in countries. Therefore, I employ hierarchical models with observations clustered in countries.

In the beginning, results of the first step of the conjoint experiment are analyzed. This shows which policy attributes lead to a support for the candidate and whether citizens

prefer stances in the direction of liberties. Each respondent (indexed by $i \in 1, ..., N$) is presented with one choice task between two candidates and is asked to indicate their preferred alternative J.

The regression includes dummy variables for all attributes of the hypothetical candidates. The regression equation is formulated as

$$\begin{aligned} choice_{ij} = \theta_0 & \\ & + \theta_1 Security[liberal]_{ij} \\ & + \theta_2 Media[liberal]_{ij} \\ & + \theta_3 Service[liberal]_{ij} \\ & + \theta_4 Gender[female]_{ij} \\ & + \theta_5 Age[56]_{ij} \\ & + \theta_6 Age[74]_{ij} \\ & + \theta_7 Occupation[lawyer]_{ij} \\ & + \theta_8 Occupation[entrepreneur]_{ij} \\ & + \theta_9 Occupation[politician]_{ij} \\ & + \theta_{10} Occupation[activist]_{ij} \\ & + \epsilon_{ij} \end{aligned}$$

in which the reference categories for the three policy proposals are the non-liberal or more invasive positions, male for gender, 38 years for age and employee for occupation.

To test the first hypothesis, I rely on logistic regression models. As dependent variable I construct a simple change variable whether respondents deviate from their first answer in the second step of the experiment in which the party affiliation of the two candidates is revealed ($change_i = chosen_{i2} - chosen_{i1}$). The basic model can be described as

$$logit(change_i) = \theta_0 + \theta_1 (AffectivePolarization_i)$$

where $AffectivePolarization_i$ is the distance between the like-dislike ratings by respondent i of the two revealed parties. The full model

$$
\begin{aligned}
logit(change_i) = \theta_0 & \\
& + \theta_1(AffectivePolarization_i) \\
& + \theta_2 SecurityUnequal_i \\
& + \theta_3 MediaUnequal_i \\
& + \theta_4 ServiceUnequal_i \\
& + \theta_5 GenderUnequal_i \\
& + \theta_6 AgeUnequal_i \\
& + \theta_7 OccupationUnequal_i
\end{aligned}
$$

includes additional binary variables which indicate whether the alternative candidate differs in each of the attributes from the preferred candidate or not. Both policy positions being equal implies that both candidates either hold liberal or anti-liberal stances. Being unequal implies that one of the two candidates holds a liberal position while the other candidate holds an anti-liberal position. Respondents indicated their preference by their first choice, which could be either liberal or anti-liberal. Both cases are treated equally. When the attribute of the not-selected candidate differs, and therefore deviates from the indicated preference, the probability to change preferences should be effected and potentially lower in comparison to both positions being equal.

To test the effect of affective polarization on the other two outcome variables (candidate should work together with others & candidate should be allowed to speak in public) only the attributes of the first selected candidate are relevant. Therefore, the regression equation contains only the attributes of this candidate. To estimate whether respondents would deny the candidate these two rights after the party reveal, the two variable measures after the reveal are used. I do not rely on a change score for these two dependent variables, as everybody should grant these rights to their preferred candidate in the first step of the experiment. Theoretically and logically, it is not plausible to deny a candidate whom someone wishes to support the right to speak in public or to cooperate with other politicians. Consequentially, respondents who did not want to grant their selected candidate these two rights in the first step of the experiment are excluded from this analysis

(5.3% for DV work together and 4.0% for DV speak in public). This allows for a simpler model which contains the characteristics of the selected candidate as well as the affective polarization measure where the out-party matches the selected candidate by design of the experiment (see subsection C.1.5 for the regression equation). The model for the variable whether the hypothetical candidate should work together with other candidates is set up analog to the model for the outcome variable allowed to speak.

Mediation. For hypotheses 2 and 3, I test whether affective polarization functions as a mediator between two binary variables and the likelihood of switching candidate preference: (1) whether the two parties are part of a governing coalition, and (2) whether the out-party is an extreme party. To be able to run a model that includes the specific in- and out-parties across all countries, I group individual parties into party families between countries. I rely on the European Party families classification from the Chapel Hill Expert Survey (CHES) wave 2024 (Rovny et al. 2025) for the main analysis. For robustness checks, I utilize the left-right classification and the Gal-Tan classification, both also provided by the CHES.[6] Parties with a left-right (or GAL-TAN) score < 2 or > 8 are treated as being extreme. In separate models, I include these potentially mediated variables following the framework of Imai, Keele, and Yamamoto (2010) for mediation analysis.

The multi-equation regression framework for causal mediation relies on strong identifying assumptions. Most importantly, it requires that the mediator be as-if randomly assigned, conditional on both the treatment and covariates (sequential ignorability assumption). This assumption is difficult to justify in observational settings, and violations can substantially bias estimates of mediation effects (Judd & Kenny 1981). Even under randomized treatment assignment, the mediator may be influenced by unobserved confounders that also affect the outcome. In the here examined case, the mediator (affective polarization) may be shaped by latent variables such as deep-seated ideological attitudes or political sophistication, which also influence switching behavior. Hence, the assumption of sequential ignorability is unlikely to hold fully. Consequentially, the here presented evidence is not interpreted as causal and should offer a first empirical step that future research can follow up on.

[6] See Figure C.6 for an overview how the three variables relate to each other.

To mitigate concerns about unobserved confounders, I control for a set of key covariates, including ideological positions and demographics. The hierarchical structure from from previous models are used again, to address potential heterogeneity in unobserved factors across countries. Lastly, results from sensitivity analysis are reported to assess the robustness of the analysis to the potential violation of the assumption of no unmeasured pre-treatment confounders (Imai, Keele, & Yamamoto 2010).

3.4 Results

Figure 3.2 shows the results for the first step of the experiment, the average marginal component effect (AMCE) of the three policies and the three candidate characteristics on the choice of a candidate.[7]

The most influential attributes on candidate choice are their policy stances for the policies containing the trade-off between civil liberties and security. In both cases, surveillance and restriction of the media, the liberal position stands out strongly and significantly. Candidates with a stance in favor of liberty are more likely to be selected. This picture is very similar across all studied countries (see Figure C.7). Exceptions are Sweden and the UK, in which effect size of being against surveillance is only half as large as in the other countries.

The third policy, being in favor or against a year of national service, has only very little influence on candidate choice. The results by country vary quite a bit, in some countries the direction of the effect even switches. However, the effect size never reaches the other two policies.

The results for the three personal candidate characteristics also influence candidate choice. Female and younger candidates are slightly preferred, as well as candidates who are not activists. Again, these attributes are clearly less influential as the policy positions containing potential restrictions of civil liberties.

Moving to the results of the second step of the experiment, Figure 3.3a shows the dis-

[7] In the appendix section C.2.4, results with measurement error correction (Clayton et al. 2023) are shown, which even strengthens the effect of the two civil liberties policies.

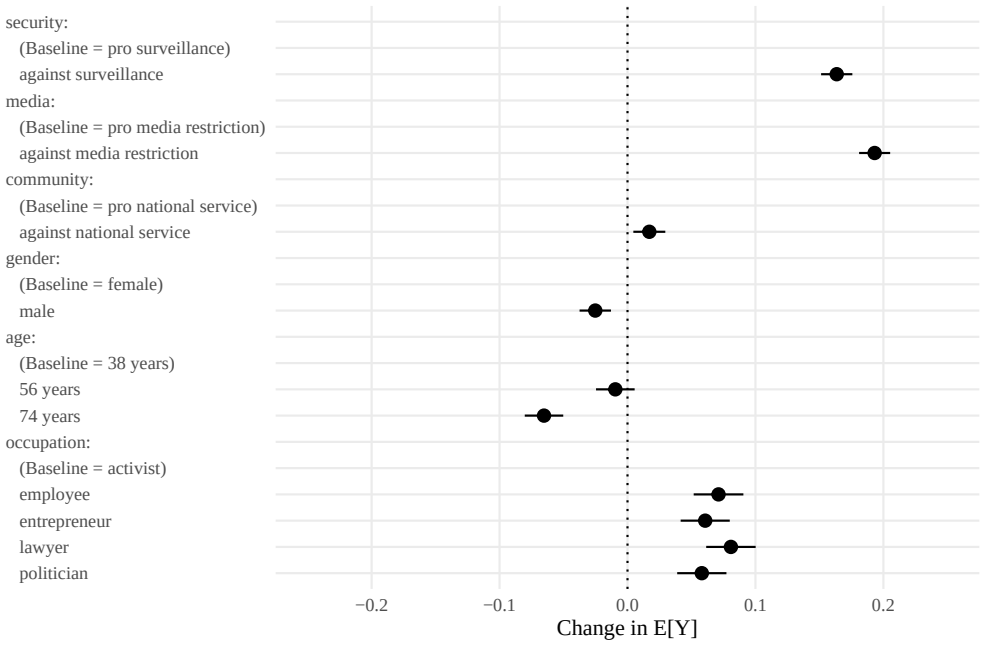
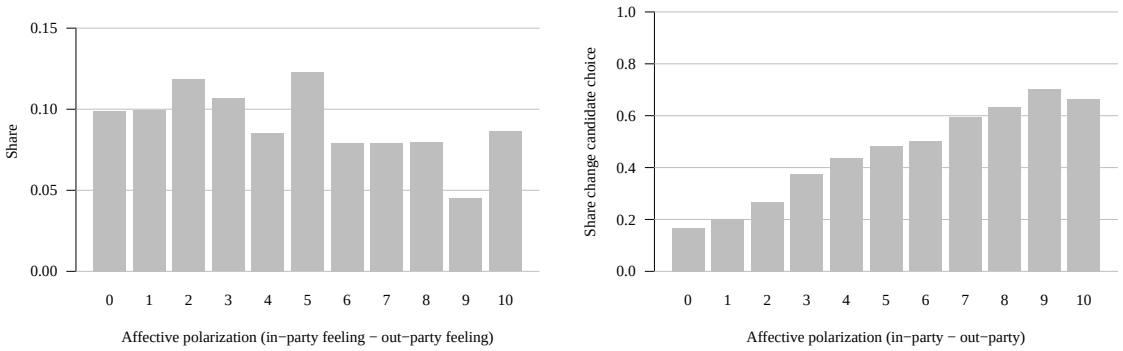


Figure 3.2: AMCE for candidate choice after the first step of the experiment (prior to party-reveal). Bars indicate 95%-confidence intervals.

tribution of affective polarization for party-dyads which is the main independent variable of interest. The variable is widely spread and covers all possible values from zero to ten. Across countries, there are slight differences in the distribution, but overall distributions look fairly similar (see Figure C.8).



(a) Distribution of affective polarization for party-dyads.

(b) Distribution of respondents changing their initial candidate choice dependent on their level of affective polarization.

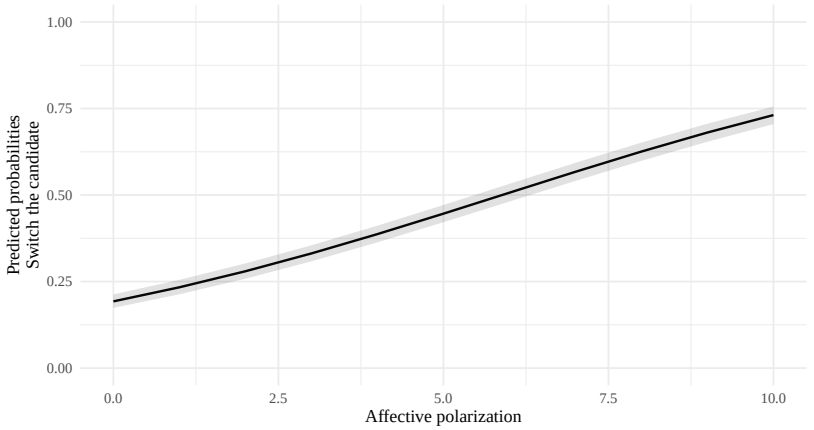
Figure 3.3: Descriptive results.

Next, we investigate the relationship between affective polarization and switching away from the candidate with preferred civil liberty policy positions. Figure 3.3b descriptively shows the share of respondents who are changing their initial candidate choice after the in- and out-party reveal. Across respondents with low values (≤ 2 on the 11-point scale) of affective polarization for revealed party-dyads, about 30% changed their candidate choice. In contrast, of respondents with high levels (≥ 8 on the 11-point scale) of affective polarization, more than 60% changed their initial choice. This provides first evidence that respondents with higher affective polarization are more willing to change their candidate choice and to give up their policy preferences for civil liberties.

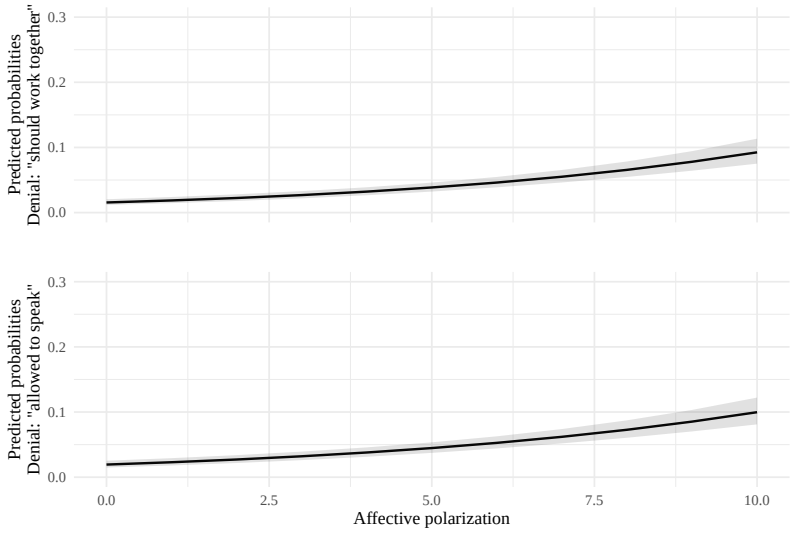
Figure 3.4 shows the main results to test hypothesis 1: the higher the affective polarization of citizens is, the more likely they are to give up their preferences for (or against) civil liberties when their preferred position is proposed by an out-party candidate. Panel (a) shows the predicted probability to change candidate choice along affective polarization. The predictions are based on a logistic regression model with respondents nested in countries without further control variables.[8] Higher levels of affective polarization increase the probability to change the initial candidate choice (preferred policy positions; assigned with out-party) and switch to the other candidate (assigned with in-party) quite drastically. This result is not only highly significant, but also substantially large. The predicted probability to change the initial candidate choice for respondents who are not polarized at all within a party dyad lies around 20%. In contrast, respondents who are maximally polarized for a party dyad on the given scale are predicted to change their initial candidate choice with about 75%. This implies that people who are more polarized are very willing to give up their choice for a candidate with their preferred policy bundle, which included policies on surveillance and the restriction of the media.

For the other two dependent variables of interest, whether the first selected politician (who got assigned with an out-party) should work together with other politicians on the issues of civil liberties and whether the same politician should be allowed to speak in public about these issues, the picture is less extreme. Figure 3.4 panel (b) and (c) show

[8] See Table C.4 for full results from the logistic regression. Linear probability models yield similar results, shown in Table C.5.



(a) Predicted probabilities to change the candidate choice after the party affiliation of both candidates is revealed dependent on affective polarization between the dyad. Results are based on model (1) in Table C.4.



(b) Predicted probabilities whether the first selected candidate, which is revealed as out-party candidate, should not work together with other candidates (upper panel) or should not be allowed to speak in public (lower panel) dependent on affective polarization between the dyad. Results are based on model (1) and model (3) in Table C.6.

Figure 3.4: Predicted probability showing the relationship between dependent variables and affective polarization. Bands around the solid lines indicate 95%-confidence intervals.

the predicted probabilities that respondents' denial for these two variables along different levels of affective polarization.[9] Almost all non-polarized respondents plead for giving the out-party candidate these rights. The prediction of denying these rights increase up to ten percentage points for respondents who are at the polarized end of the scale.

3.4.1 Robustness and Benchmark

Overall, the shown effects of affective polarization are very consistent across individual countries. First, separated by country, this can be seen in the descriptive trend between changing candidate choice and affective polarization (see Figure C.9). Second, in the regression models, this is reflected by small random intercept deviations (see Figure C.10). Accordingly, predicted probabilities for all three dependent variables by country, are again very similar (see Figure C.11).

A comparison of different models (random intercept, random slopes, uncorrelated random slopes) revealed that the random intercept model delivers the best fit. This evaluation is based on AIC/BIC and an ANOVA test (see Table C.7). This again highlights that the effect of affective polarization is very similar across countries.

To provide more robustness to the main results, a series of regressions have been calculated for main dependent variable, the change to the other candidate. The formulation of the main DV after the party affiliation reveal is: "Would you still like to vote for candidate [A/B; dependent on first choice] or do you prefer to vote for candidate [B/A; dependent on first choice] now?" This formulation reflects the theoretical idea of changing the choice and switching to the other candidate or not changing the choice and staying with the initial candidate. However, one might argue that this formulation could lead respondents in one direction or the other. Therefore, 10% of the respondents received an alternative formulation of the main DV. This subsample received the unpretentious question "Which candidate would you vote for?". This is the same question wording that everybody has been used to get the initial evaluation of the candidates in step 1 of the experiment. Due to small sample size, a pooled model with all countries has been used to estimate the effect of affective polarization on changing the candidate. The estimates are presented in Table C.8

[9] See Table C.6 for full regression results.

and are almost identical to the main results as shown in Table C.4.

The second series of robustness analysis concerns the the independent variable of interest: affective polarization for the party-dyad. First, due to the randomization of the experiment, shown candidates could be assigned with two parties for which respondents have the same feeling. This additional reduces the sample in comparison to the previous analysis in which the equally rated party has not been part of the experimental assignment. The results are shown in Table C.9 model (1) and (2). Results remain unchanged. Second, some respondents do not have a clear in-party, since they could have the same warmest feeling towards two parties. In Table C.9 model (3) and (4), those cases without an unclear in-party due to multiple highest scores have been excluded. This additional reduces the sample in comparison to the previous analysis in which the equally rated party has not been part of the experimental assignment. The subsample only contains respondents that are at least somewhat polarized (affective polarization > 0). The strong effect of affective polarization remains unchanged. Lastly, the effect of affective polarization could be driven by feelings towards extreme parties.[10] This could go in both directions, respondents with a strong preference for an extreme (in-)party as well as respondents with a strong dislike for an extreme (out-)party could drive the results. Table C.10 shows the results without any experimental manipulation that contains an extreme party (in-party, out-party or both). The strong effect of affective polarization remains unchanged.

A third set of models is centered around the candidates characteristics and the assigned policy position. Unequal policy positions between the two hypothetical candidates should reduce the probability of a respondent to change their choice to the other candidate. The first step of the experiment already sorts and measures respondents preferences for the attribute bundle. Therefore, a difference in one of the dimensions should on average reduce the probability to switch to the other candidate. The results show that a different policy position of the other candidate significantly lowers the probability of a respondent to change their initial candidate choice (see Table C.4). In a subgroup analysis only those candidate profile pairs that are different in all three policy positions/the two civil liberties policies were analyzed. Switching away from one of the remaining profiles always includes giv-

[10] Parties are classified as extreme based on the CHES party family classification (Rovny et al. 2025).

ing up the previously preferred policy position. Results are shown in Table C.11. Note that the sample size for this subgroup analysis become quite small, but still the effect of affective polarization on the probability to switch remains unchanged.

The fourth set of robustness checks is centered around respondents' general attitudes towards civil liberties and security. In the first model, control variables for respondents' preference for civil liberties (0 - not important to 10 - very important), preference for security (0 - not important to 10 - very important) and the trade-off between the two (-5 preference for freedom to +5 preference for security) are included. Since profile pairs were randomly assigned to respondents, these variables should not change the results, which holds true (see Table C.12 model (1) to (3)). A subgroup analysis with those respondents that have very strong preferences for civil liberties (10 - very important) also does not change the results (see Table C.12 model (4) and (5)).

Fifth, after respondents indicated their candidate choice and answered questions about the other two DVs, they were asked to make a party guess for both candidates. In another subgroup analysis, only respondents that did not provide party guess for both candidates (answered "Don't know") were used for the estimation. The theoretical idea behind this subset is that some respondents might be thinking of a party in the first step, even though the two-step experimental design explicitly not mentions any party cue in the first step. Those respondents who did not come up with a party guess, even after prompting them to think about a party, are unlikely to have thought about a party while answering the DVs. Using this subsample of respondents who had no party in mind when answering the initial choice question allows for another test of the general argument. For this subsample the proposed mechanism can be tested without influence of self-created party guesses. Results reveal a moderately stronger effect of affective polarization in comparison to the whole sample or the subsample of respondents with a party guess for both candidates (see Table C.13). The results also hold for respondents with party guesses for both candidates.

Sixth, the general probability of switching away from one candidate to the other due to affective polarization is compared to the switch away from an independent candidate to the in-party candidate. In the second step of the experiment, 16.3% of respondents were presented with an out-party candidate labeled as "independent" instead of being identi-

fied with a party. Based on the definition used for affective polarization, citizens cannot be polarized towards an independent candidate. Therefore, affective polarization cannot be calculated for this case. However, the comparison to switch away from an independent candidate with preferred policy positions to the in-party candidate with less preferred policy position provides a general benchmark. Figure 3.5 shows the predicted probabilities to change candidate preference when the selected and afterwards revealed candidate is independent compared to any out-party candidate.[11] The probability to switch away from the independent candidate is about 26%, which is only slightly higher as the earlier shown probability for switching when being almost not polarized for a party-dyad (see Figure 3.4a). Any candidate with an out-party affiliation leads to a predicted probability to switch away from that candidate of 43%. Accordingly, the difference in probability to switch away from an out-party candidate is 16 percentage points higher than to switch away from an independent candidate. This illustrates that respondents do not always give up their preferred policy bundle and switch to their in-party candidate.

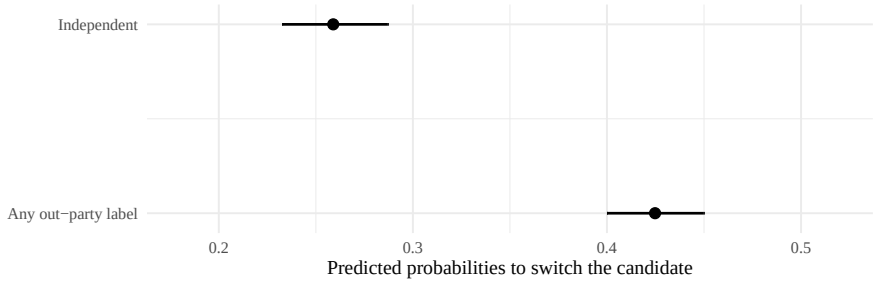


Figure 3.5: Comparison of switching away from the candidate with preferred policy positions in the second step of the experiment when the party affiliation is revealed as "independent" or any other out-party.

Lastly, the credibility of the treatment, namely policy and party combinations, shall be discussed. While the combination of policy positions was fully randomized, the in-party of the respondent was assigned to the disliked/not selected candidate. Some of the combinations might appear more credible then others. Learning about the position of a candidate from the preferred party could be surprising for respondents. The combination

[11] Full regression results in Table C.14.

of policy position and party could be unusual and against general perception of the party. To get an idea, how respondents perceive this potential discrepancy, they have been asked after answering the dependent variables in the second step of the experiment, how likely it is that a politician from their in-party will make a policy proposal such as the shown one. The mode answer is the midpoint of the eleven-point scale (25.9%), indicating that respondents considered the proposal neither as likely or unlikely. 16.6% consider the policy proposal as very unlikely (see Figure C.13 for the full distribution). Adding respondents' judged likelihood of the proposal as control variable to the main regression analysis shows that a higher perceived likelihood increases the probability to change to the in-party candidate. At the same time, the effect of affective polarization remains stable (see Table C.15), which makes the issue of incredible treatment combinations less concerning. However, this analysis should be treated with caution, since the likelihood of the proposals has been measured post-treatment.

3.4.2 The case of extreme parties

When it comes to affective polarization and its effect on voters, extreme parties are assumed to take a special role. With their extreme positions, they are disliked strongly by many citizens. At the same time their partisans might feel a strong aversion towards other parties and partisans. This raises the question how and whether the relationship between the here presented switching logic (away from a candidate with preferred policy positions) differs when an extreme party is included in the party-dyad.

Theoretical, the effect of affective polarization must not be symmetric between citizens with an extreme in-party and citizens with a center party as their in-party for the respective party pair, i.e., extreme in-party—center out-party $\neq$ center in-party—extreme out-party. Partisans of right-wing parties are more polarized towards other parties as elite policy differences would predict, but to a smaller degree then the non-right-wing partisans (Gidron et al. 2023). Furthermore, extreme partisans with a high a unitary high dislike towards all out-parties are least supportive of democracy (Vanagt et al. 2024). While for some partisans of extreme parties issue stances are still relevant, others do support the party in any case. For example, Chou et al. (2021) show that in the German case AfD

voters vote for the party because of their anti-immigration stance. As soon as the AfD softens their stance, the probability of voters to vote for them decreases. For other issues they were less sensitive. "Finally, although many AfD voters change partisan allegiances based on issue fit, we also find that nearly half never do" (Chou et al. 2021: p. 28). Since non-extreme party sympathizers mostly want to avoid extreme parties at all costs, I expect that affective polarization has a stronger effect for non-extreme voters to give up their civil liberty preferences when they are proposed by an extreme party than vise-versa.

The results for the two cases are shown in Figure 3.6.[12] At lower polarization levels (bottom half of the scale) there is no difference in the predicted probability to switch to the other candidate. In contrast, the results between the two cases differ for higher polarization levels. Respondents with an moderate in-party are 15 percentage points more likely to switch away from a candidate with an extreme out-party with preferred policy position in comparison to somebody with an extreme in-party that has to switch away from a moderate out-party with preferred policy positions.

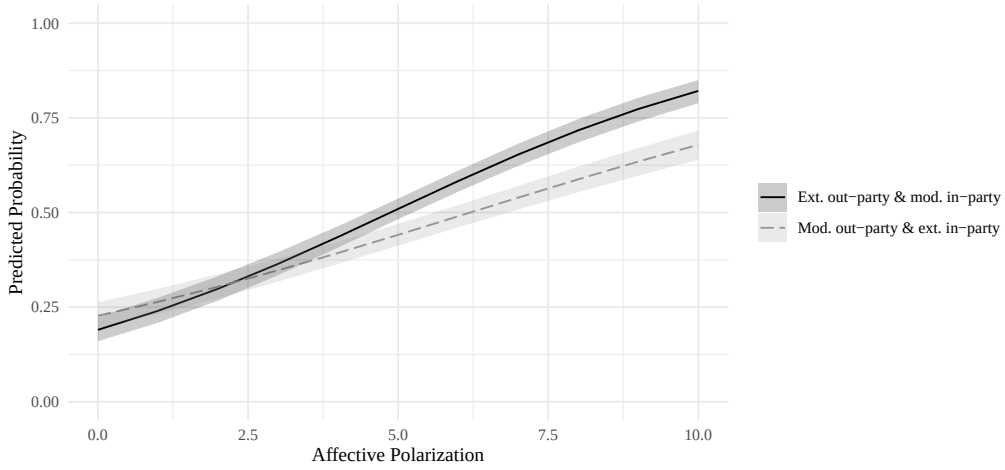


Figure 3.6: Comparison of probability to switch away from an extreme out-party to moderate in-party vs. switching from a moderate out-party to an extreme in-party. The candidate with the later revealed out-party was chosen by the respondent in the first step of the experiment based on their policy positions and demographic attributes.

[12] Full regression results in Table C.16.

3.4.3 Mediation through affective polarization

The results of the mediation analysis for the two shown candidates' parties being part of a governing coalition is presented in Figure 3.7.[13] The results show the different pathways of the mediation model, including the indirect path, represented by the Average Mediation Effect (AME)[14], the direct path, represented by the Average Direct Effects (ADE) and the combined indirect and direct effect, represented by the Total Effect.

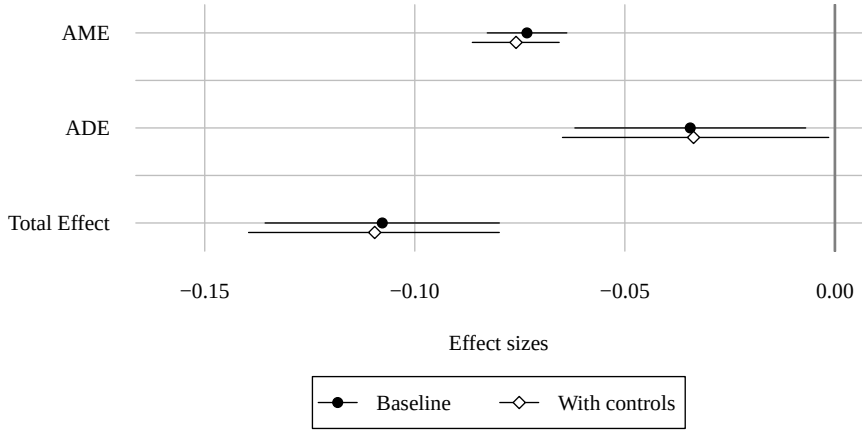


Figure 3.7: Results from fitted mediation models to test H2. Theoretical mediation path: Two shown candidate are part of a governing coalition → affective polarization → probability to switch to the other candidate with less preferred positions on civil liberties. Bars indicate 95% confidence intervals based on non-parametric bootstrap estimation. Model with controls additionally includes variables for gender, age, education and left-right self-assessment.

The mediation analysis indicates that the effect of coalition status on respondents' probability to switch candidates is both statistically significant and largely mediated by affective polarization. The total effect of coalition membership on switching is negative (Total Effect = -0.10), suggesting that voters are less likely to substitute candidates who are part of the same coalition. A substantial portion of this effect operates through reduced affective polarization: coalition status is associated with lower levels of respondents' af-

[13] Full regression results for all mediation models with and without control variables in subsection C.2.7.

[14] I avoid a causal language here as the mediator is not manipulated independently, see discussion in the method section.

fective polarization between shown candidates, and lower polarization is associated with a decreased likelihood of switching (AME = -0.07). The direct effect of coalition status remains significant (ADE = -0.03), indicating that other mechanisms, e.g., policy similarity, perceived cooperation, or elite signaling, also contribute. Overall, 68% of the total effect is mediated through affective polarization, underscoring its central role in shaping voter behavior in multiparty coalition settings.

The results are robust to different model specifications, such as the inclusion of control variables. A sensitivity analysis to test for the violation of the sequential ignorability assumption reveals that the results become insignificant when the sensitivity parameter ρ reaches a value of 0.3 (see Figure C.14). The degree of robustness based on the value of the sensitivity parameter needs to be evaluated in comparison to other studies. For example, Keele et al. (2015) judge a value of 0.3 as "modest violation".

The finding aligns with theoretical expectations that affective polarization acts as a mediator between the coalition status of two parties and their candidates and voters' preferences to stick with an out-party candidate with preferred policy positions. Accordingly, the effect of being part of a coalition and the punishment by voters for proposing disliked positions on civil liberties depends on the affective polarization that is perceived between the two candidates. The logic of the coalition heuristic is supported by these findings.

The second mediation analysis examines whether assigning an extreme party family to the candidate with preferred policy preferences increases vote switching through heightened affective polarization. The results are shown in Figure 3.8. They indicate a significant total effect (0.12), suggesting that voters are more likely to switch away from candidates affiliated with extremist parties. Nearly half of this effect operates through increased affective polarization: the average causal effect (AME = 0.06) demonstrates that extremism heightens affective polarization between candidates, which in turn raises the probability of switching. The direct effect (ADE = 0.06) remains substantial, indicating that other factors, for example perceived ideological distance or doubts about electability, also contribute to switching behavior. 49% of the total effect is mediated via affective polarization, highlighting its importance to understand voter reactions to party extremism.

To test the robustness of the results, two alternative strategies to measure ideology have

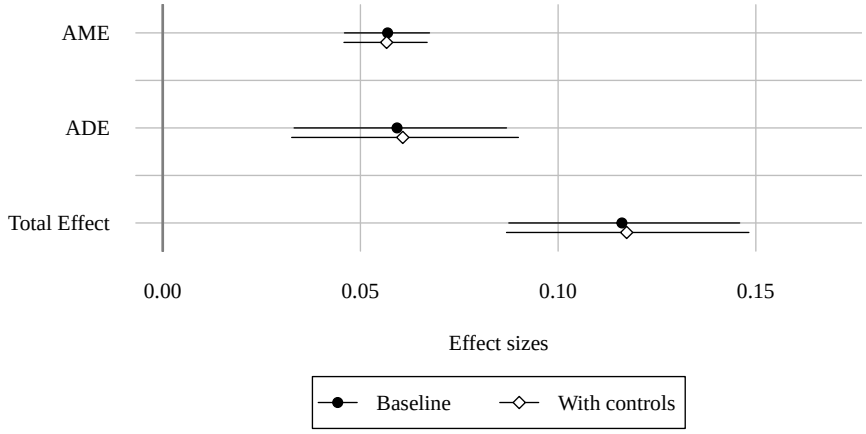


Figure 3.8: Results from fitted mediation models to test H3. Theoretical mediation path: First selected candidate has an extreme party-affiliation → affective polarization → probability to switch to the other candidate with less preferred positions on civil liberties. Bars indicate 95% confidence intervals based on non-parametric bootstrap estimation. Model with controls additionally includes variables for gender, age, education and left-right self-assessment.

been used: the left-right scale and the GAL-TAN classification. When using the left-right scale instead of party families (Table C.19), the AME becomes smaller, about half in size, while the direct effect remains equally large. This result supports the main finding. However, the results do not replicate with the GAL-TAN classification (Table C.19) with which the the AME become close to zero and insignificant. As in the the sensitivity analysis of the previous mediation model, the sensitivity parameter ρ reaches a value of 0.3 (see Figure C.15). Again, this is interpreted as "modest violation" of the sequential ignorability assumption.

The results support the claim that citizens willingness to give up a candidate with preferred civil liberties policies and an extreme-party affiliation is partially mediated through affective polarization. This implies that extreme party affiliation leads to stronger affective polarization for a given party pair, which then leads to higher probability of giving up the respective candidate.

3.5 Summary/Discussion

This chapter contributes to ongoing discussions on the effect of affective polarization on citizens' political attitudes, focusing on the for democracy crucial policy area of civil liberties. While much of the existing literature on affective polarization has emphasized its consequences for partisan animosity, trust, and the willingness to compromise, less attention has been paid to how it shapes support for fundamental democratic rights and freedoms (Broockman et al. 2022). Civil liberties–such as privacy rights, freedom of speech, and free media–constitute the backbone of liberal democracy, yet they may become increasingly contested when political opponents are perceived not merely as rivals but as threats to the political community. By examining this intersection, the chapter highlights how affective polarization may erode consensus on basic democratic norms.

By employing a novel two-step conjoint experiment, I solve the problem of intertwined support for parties and policies. In the first step, respondents policy preferences are identified with a classical forced conjoint design. Since no party cues are provided, any priming of respondents through such cues is omitted. Only in the second step then, party cues are added to the two previously shown candidates. This allows me to determine the effect of affective polarization on the willingness to give up preferred policy positions. With the focus on affective polarization, the experiment goes beyond mere party-cues, considering both the positive effect of in-parties and the negative effect of out-parties on citizens attitudes. This design follows recent developments of politically motivated reasoning (Kahan 2015a; Tappin et al. 2020), separating the effect of party labels, and consequentially affective polarization, from support for civil liberties policies.

The results have shown a very strong effect of affective polarization on giving up the support for candidates with preferred civil liberty policy positions. The more polarized a respondent is for a shown party-dyad, the more likely she is to give up the candidate with preferred civil liberty policy positions. The difference between respondents with low levels of affective polarization and those with high levels of affective polarization, is about 50 percentage points. These results hold for a plethora of robustness checks: different model specifications, sub-samples or alternative dependent variable formulation. This finding

indicates a lack of willingness to go beyond party preferences to secure important civil liberties, which is in line with other recent studies about democratic backsliding (Gidron et al. 2025; Graham & Svolik 2020).

While these results are worrying, there are also positive findings when it comes to the support for democratic principles. I found a very limited effect on respondents indicating that candidates from an out-party should be denied to work together with other politicians or be denied speaking in public about their positions. Among respondents with the highest level of affective polarization, ten percent are in favor of denying politicians from the out-party (who hold the preferred civil liberty policy position of these respondents) these two rights. While this finding in itself is also somewhat troubling, it only concerns a small proportion of the overall population. Furthermore, the effect of affective polarization on support for these two democratic values is way lower then for previously described effect sizes of giving up policy preferences. This finding is reassuring since affective polarization does not trump basic democratic principles such as the search for compromise and free speech.

References

Abramowitz, A. I., & Webster, S. W. (2018). Negative Partisanship: Why Americans Dislike Parties But Behave Like Rabid Partisans. *Political Psychology*, *39*(Suppl. 1), 119–135.

Achen, C. H., & Bartels, L. M. (2017). *Democracy for Realists: Why Elections Do Not Produce Responsive Government*. Princeton University Press.

Allport, G. W. (1935). Attitudes. In C. Murchison (Ed.), *A handbook of social psychology* (pp. 789–844). Clark University Press.

Amat, F., Arenas, A., Falcó-Gimeno, A., & Muñoz, J. (2020). Pandemics meet democracy. Experimental evidence from the COVID-19 crisis in Spain. *Preprint SocArXiv*.

Amsalem, E., & Zoizner, A. (2022). Real, but Limited: A Meta-Analytic Assessment of Framing Effects in the Political Domain. *British Journal of Political Science*, *52*(1), 221–237.

Angrist, J. D., Imbens, G. W., & Rubin, D. B. (1996). Identification of Causal Effects Using Instrumental Variables. *Journal of the American Statistical Association*, *91*(434), 444–455.

Antoine, L. (2023). Costs, Inconvenience, or Civil Rights? Investigating Determinants of Public Support for Surveillance. *Surveillance & Society*, *21*(4), 409–431.

Arceneaux, K., Bakker, B. N., Fasching, N., & Lelkes, Y. (2025). A critical evaluation and research agenda for the study of psychological dispositions and political attitudes. *Political Psychology*, *46*(S1), 7–37.

Arceneaux, K., Gerber, A. S., & Green, D. P. (2006). Comparing Experimental and Matching Methods Using a Large-Scale Voter Mobilization Experiment. *Political Analysis*, *14*(1), 37–62.

Asbrock, F., & Fritsche, I. (2013). Authoritarian reactions to terrorist threat: Who is being threatened, the Me or the We? *International Journal of Psychology*, *48*(1), 35–49.

Auspurg, K., & Hinz, T. (2015). *Factorial Survey Experiments*. SAGE Publications, Inc.

Bakker, B. N., Schumacher, G., & Rooduijn, M. (2021). Hot Politics? Affective Responses to Political Rhetoric. *American Political Science Review*, *115*(1), 150–164.

Balzacq, T., Léonard, S., & Ruzicka, J. (2016). 'Securitization' revisited: Theory and cases. *International Relations*, *30*(4), 494–531.

Banks, A. J., & Valentino, N. A. (2012). Emotional Substrates of White Racial Attitudes. *American Journal of Political Science*, *56*(2), 286–297.

Barabas, J., Jerit, J., Pollock, W., & Rainey, C. (2014). The Question(s) of Political Knowledge. *American Political Science Review*, *108*(4), 840–855.

Barber, M., & Pope, J. C. (2019). Does Party Trump Ideology? Disentangling Party and Ideology in America. *American Political Science Review*, *113*(1), 38–54.

Baron, R. M., & Kenny, D. A. (1986). The Moderator-Mediator Variable Distinction in Social Psychological Research: Conceptual, Strategic, and Statistical Considerations. *Journal of Personality and Social Psychology*, *Vol. 51*(No. 6), 1173–1182.

Bassan-Nygate, L., & Weiss, C. M. (2022). Party Competition and Cooperation Shape Affective Polarization: Evidence from Natural and Survey Experiments in Israel. *Comparative Political Studies*, *55*(2), 287–318.

Belardinelli, P., Belle, N., Cantarelli, P., & Battaglio, P. (2022). Performance-related pay, fairness perceptions, and effort in public management tasks: A parallel encouragement design. *International Review of Administrative Sciences*, 1–17.

Berlin, I. (1969). Two Concepts of Liberty. In *Four Essays on Liberty* (pp. 121–54, 169–72). Oxford: Clarendon Press.

Bermeo, N. (2016). On Democratic Backsliding. *Journal of Democracy*, *27*(1), 5–19.

Berntzen, L. E., Kelsall, H., & Harteveld, E. (2024). Consequences of affective polarization: Avoidance, intolerance and support for violence in the United Kingdom and Norway. *European Journal of Political Research*, *63*(3), 927–949.

Bisgaard, M., & Slothuus, R. (2018). Partisan Elites as Culprits? How Party Cues Shape Partisan Perceptual Gaps. *American Journal of Political Science*, *62*(2), 456–469.

Bolsen, T., Druckman, J. N., & Cook, F. L. (2014). The Influence of Partisan Motivated Reasoning on Public Opinion. *Political Behavior*, *36*(2), 235–262.

Bordalo, P., Gennaioli, N., & Shleifer, A. (2022). Salience. *Annual Review of Economics*, *14*, 521–544.

Boudreau, C., & MacKenzie, S. A. (2014). Informing the Electorate? How Party Cues and Policy Information Affect Public Opinion about Initiatives. *American Journal of Political Science*, *58*(1), 48–62.

Bourbeau, P. (2011). *The Securitization of Migration: A Study of Movement and Order*. Taylor & Francis.

Boussalis, C., Coan, T. G., Holman, M. R., & Müller, S. (2021). Gender, Candidate Emotional Expression, and Voter Reactions During Televised Debates. *American Political Science Review*, *115*(4), 1242–1257.

Bozzoli, C., & Müller, C. (2011). Perceptions and attitudes following a terrorist shock: Evidence from the UK. *European Journal of Political Economy*, *27*, 89–106.

Brader, T. (2005). Striking a Responsive Chord: How Political Ads Motivate and Persuade Voters by Appealing to Emotions. *American Journal of Political Science*, *49*(2), 388–405.

Brader, T., Valentino, N. A., & Suhay, E. (2008). What Triggers Public Opposition to Immigration? Anxiety, Group Cues, and Immigration Threat. *American Journal of Political Science*, *52*(4), 959–978.

Bradley, M. M., Codispoti, M., Cuthbert, B. N., & Lang, P. J. (2001). Emotion and motivation I: Defensive and appetitive reactions in picture processing. *Emotion*, *1*, 276–298.

Braley, A., Lenz, G. S., Adjodah, D., Rahnama, H., & Pentland, A. (2023). Why voters who value democracy participate in democratic backsliding. *Nature Human Behaviour*, 1–12.

Breznau, N. (2021). The welfare state and risk perceptions: The Novel Coronavirus Pandemic and public concern in 70 countries. *European Societies*, *23*(S1), 33–46.

Broockman, D. E., Kalla, J. L., & Westwood, S. J. (2022). Does Affective Polarization Undermine Democratic Norms or Accountability? Maybe Not. *American Journal of Political Science*, *67*(3), 808–828.

Bullock, J. G. (2011). Elite Influence on Public Opinion in an Informed Electorate. *American Political Science Review*, *105*(3), 496–515.

Bullock, J. G., & Green, D. P. (2021). The Failings of Conventional Mediation Analysis and a Design-Based Alternative. *Advances in Methods and Practices in Psychological Science*, *4*(4), 1–18.

Bullock, J. G., Green, D. P., & Ha, S. E. (2010). Yes, but what's the mechanism? (don't expect an easy answer). *Journal of Personality and Social Psychology*, *98*(4), 550–558.

Bullock, J. G., & Shang, E. H. (2012). Mediation Analysis is Harder Than It Looks. In J. N. Druckman, D. P. Green, J. H. Kuklinski, & A. Lupia (Eds.), *Cambridge handbook of experimental political science* (2. ed, pp. 508–521). Cambridge Univ. Press.

Bundesverfassungsgericht. (2010). Urteil vom 2. März 2010 [website; Retrieved September 18, 2025].

Bundesverfassungsgericht. (2021). Unsuccessful constitutional complaints regarding curfews and contact restrictions in the Fourth Act to Protect the Population During an Epidemic Situation of National Significance ("federal pandemic emergency brake") [website; Retrieved September 18, 2025].

Callander, S., & McCarty, N. (2024). Agenda Control under Policy Uncertainty. *American Journal of Political Science*, *68*(1), 210–226.

Campbell, A., Converse, P. E., Miller, W. E., & Stokes, D. E. (1960). *The American Voter*. University of Chicago Press.

Caprara, G. V., Schwartz, S., Capanna, C., Vecchione, M., & Barbaranelli, C. (2006). Personality and Politics: Values, Traits, and Political Choice. *Political Psychology*, *27*(1), 1–28.

Carey, J., Clayton, K., Helmke, G., Nyhan, B., Sanders, M., & Stokes, S. (2020). Who will defend democracy? Evaluating tradeoffs in candidate support among partisan donors and voters. *Journal of Elections, Public Opinion and Parties*, *32*(1), 230–245.

Carver, C. S., & Harmon-Jones, E. (2009). Anger is an approach-related affect: Evidence and implications. *Psychological Bulletin*, *135*(2), 183–204.

Cassese, E., & Weber, C. (2011). Emotion, Attribution, and Attitudes towards Crime. *Journal of Integrated Social Sciences*, *2*(1), 63–97.

Caton, C., & Mullinix, K. J. (2023). Partisanship and Support for Restricting the Civil Liberties of Suspected Terrorists. *Political Behavior*, *45*, 1421–1445.

Caughey, D., & Warshaw, C. (2018). Policy Preferences and Policy Change: Dynamic Responsiveness in the American States, 1936–2014. *American Political Science Review*, *112*(2), 249–266.

Chong, D., & Druckman, J. N. (2007). Framing Public Opinion in Competitive Democracies. *American Political Science Review*, *101*(4), 637–655.

Chong, D., & Druckman, J. N. (2010). Dynamic Public Opinion: Communication Effects over Time. *American Political Science Review*, *104*(4), 663–680.

Chou, W., Dancygier, R., Egami, N., & Jamal, A. A. (2021). Competing for Loyalists? How Party Positioning Affects Populist Radical Right Voting. *Comparative Political Studies*, *54*(12), 2226–2260.

Ciuk, D. J., & Yost, B. A. (2016). The Effects of Issue Salience, Elite Influence, and Policy Content on Public Opinion. *Political Communication*, *33*(2), 328–345.

Clayton, K., Horiuchi, Y., Kaufman, A. R., King, G., & Komisarchik, M. (2023). Correcting Measurement Error Bias in Conjoint Survey Experiments. *Preprint*.

Cohen, G. L. (2003). Party over policy: The dominating impact of group influence on political beliefs. *Journal of Personality and Social Psychology*, *85*(5), 808–822.

Cohen, M. J., Smith, A. E., Moseley, M. W., & Layton, M. L. (2023). Winners' Consent? Citizen Commitment to Democracy When Illiberal Candidates Win Elections. *American Journal of Political Science*, *67*(2), 261–276.

Cohen-Louck, K. (2019). Perception of the Threat of Terrorism. *Journal of Interpersonal Violence*, *34*(5), 887–911.

Coppedge, M., & et. al. (2023). V-Dem Dataset v13.

Crawford, J. T., & Pilanski, J. M. (2014). Political Intolerance, Right and Left. *Political Psychology*, *35*(6), 841–851.

Dahl, R. A. (1998). *On democracy*. Yale University Press.

Davis, D. W., & Silver, B. D. (2004). Civil Liberties vs. Security: Public Opinion in the Context of the Terrorist Attacks on America. *American Journal of Political Science*, *48*(1), 28–46.

Denver, D., & Hands, G. (1990). Does Studying Politics Make a Difference? The Political Knowledge, Attitudes and Perceptions of School Students. *British Journal of Political Science*, *20*(2), 263–279.

Druckman, J. N. (2001). On the Limits of Framing Effects: Who Can Frame? *The Journal of Politics*, *63*(4), 1041–1066.

Druckman, J. N., Klar, S., Krupnikov, Y., Levendusky, M., & Ryan, J. B. (2021). Affective polarization, local contexts and public opinion in America. *Nature Human Behaviour*, *5*(1), 28–38.

Druckman, J. N., & Levendusky, M. S. (2019). What Do We Measure When We Measure Affective Polarization? *Public Opinion Quarterly*, *83*(1), 114–122.

Druckman, J. N., & McDermott, R. (2008). Emotion and the Framing of Risky Choice. *Political Behavior*, *30*(3), 297–321.

Druckman, J. N., Peterson, E., & Slothuus, R. (2013). How Elite Partisan Polarization Affects Public Opinion Formation. *American Political Science Review*, *107*(1), 57–79.

Egami, N., & Imai, K. (2019). Causal Interaction in Factorial Experiments: Application to Conjoint Analysis. *Journal of the American Statistical Association*, *114*(526), 529–540.

Epifanio, M. (2011). Legislative response to international terrorism. *Journal of Peace Research*, *48*(3), 399–411.

Epley, N., & Gilovich, T. (2016). The Mechanics of Motivated Reasoning. *Journal of Economic Perspectives*, *30*(3), 133–140.

Erhardt, J., Freitag, M., Filsinger, M., & Wamsler, S. (2021). The Emotional Foundations of Political Support: How Fear and Anger Affect Trust in the Government in Times of the Covid-19 Pandemic. *Swiss Political Science Review*, *27*(2), 339–352.

Etzioni, A. (2005). *How Patriotic is the Patriot Act?: Freedom Versus Security in the Age of Terrorism*. Routledge.

European Comission. (2015). *Commission Issues Opinion on Temporary Reintroduction of Controls at Internal Borders: Germany and Austria acting in compliance with Schengen Borders Code* (European Commission - Press Release) [website] (Retrieved September 18, 2025).

Feldman, S. (2013). Comments on: Authoritarianism in social context: The role of threat. *International Journal of Psychology*, *48*(1), 55–59.

Ferrer, S., Hernández, E., Prada, E., & Tomic, D. (2025). The value of liberal democracy: Assessing citizens' commitment to democratic principles. *European Journal of Political Research*, *64*(4), 2018–2038.

Fiddick, L. (2004). Domains of deontic reasoning: Resolving the discrepancy between the cognitive and moral reasoning literatures. *The Quarterly Journal of Experimental Psychology Section A*, *57*(3), 447–474.

Fortunato, D., & Stevenson, R. T. (2013). Perceptions of Partisan Ideologies: The Effect of Coalition Participation. *American Journal of Political Science*, *57*(2), 459–477.

Fowler, A., & Howell, W. G. (2023). Updating amidst Disagreement: New Experimental Evidence on Partisan Cues. *Public Opinion Quarterly*, *87*(1), 24–43.

Freeder, S., Lenz, G. S., & Turney, S. (2019). The Importance of Knowing "What Goes with What": Reinterpreting the Evidence on Policy Attitude Stability. *The Journal of Politics*, *81*(1), 274–290.

Freedom House. (2025). Germany: Freedom in the World 2025 Country Report [website; Retrieved September 18, 2025].

Frijda, N. H. (1986). *The Emotions*. Cambridge University Press.

Frijda, N. H., Kuipers, P., & ter Schure, E. (1989). Relations among emotion, appraisal, and emotional action readiness. *Journal of Personality and Social Psychology*, *57*(2), 212–228.

Fritsche, I., Jonas, E., & Kessler, T. (2011). Collective Reactions to Threat: Implications for Intergroup Conflict and for Solving Societal Crises. *Social Issues and Policy Review*, *5*(1), 101–136.

Gadarian, S. K. (2010). The Politics of Threat: How Terrorism News Shapes Foreign Policy Attitudes. *The Journal of Politics*, *72*(2), 469–483.

Garzia, D., Ferreira da Silva, F., & Maye, S. (2023). Affective Polarization in Comparative and Longitudinal Perspective. *Public Opinion Quarterly*, *87*(1), 219–231.

Gerber, A. S., & Green, D. P. (2012). *Field Experiments: Design, Analysis, and Interpretation* (First edition). W.W. Norton & Company.

Gerber, A. S., Huber, G. A., Doherty, D., Dowling, C. M., & Ha, S. E. (2010). Personality and Political Attitudes: Relationships across Issue Domains and Political Contexts. *American Political Science Review*, *104*(1), 111–133.

Giani, M., Epifanio, M., & Ivandic, R. (2021). Wait and see? Public opinion dynamics after terrorist attacks. *Preprint SocArXiv*.

Gibson, J. L., & Bingham, R. D. (1985). *Civil Liberties and Nazis: The Skokie Free-Speech Controversy*. Praeger.

Gidron, N., Adams, J., & Horne, W. (2020). *American Affective Polarization in Comparative Perspective* (1st ed.). Cambridge University Press.

Gidron, N., Adams, J., & Horne, W. (2023). Who Dislikes Whom? Affective Polarization between Pairs of Parties in Western Democracies. *British Journal of Political Science*, *53*(3), 997–1015.

Gidron, N., Margalit, Y., Sheffer, L., & Yakir, I. (2025). Why masses support democratic backsliding. *American Journal of Political Science*, 1–18.

Gidron, N., Sheffer, L., & Mor, G. (2022). Validating the feeling thermometer as a measure of partisan affect in multi-party systems. *Electoral Studies*, *80*, 102542.

Gilens, M. (2001). Political Ignorance and Collective Policy Preferences. *American Political Science Review*, *95*(2), 379–396.

Goya-Tocchetto, D., Kay, A. C., Vuletich, H., Vonasch, A., & Payne, K. (2022). The partisan trade-off bias: When political polarization meets policy trade-offs. *Journal of Experimental Social Psychology*, *98*, 104231.

Graham, M. H., & Svolik, M. W. (2020). Democracy in America? Partisanship, Polarization, and the Robustness of Support for Democracy in the United States. *American Political Science Review*, *114*(2), 392–409.

Green, D. P., Ha, S. E., & Bullock, J. G. (2010). Enough Already about "Black Box" Experiments: Studying Mediation Is More Difficult than Most Scholars Suppose.

The ANNALS of the American Academy of Political and Social Science, *628*(1), 200–208.

Groenendyk, E. (2011). Current Emotion Research in Political Science: How Emotions Help Democracy Overcome its Collective Action Problem. *Emotion Review*, *3*(4), 455–463.

Haider-Markel, D. P., Joslyn, M. R., & Al-Baghal, M. T. (2006). Can We Frame the Terrorist Threat? Issue Frames, the Perception of Threat, and Opinions on Counterterrorism Policies. *Terrorism and Political Violence*, *18*(4), 545–559.

Haidt, J. (2003). The moral emotions. In R. J. Davidson, K. R. Scherer, & H. H. Goldsmith (Eds.), *Handbook of affective sciences* (pp. 852–870, Vol. 11). Oxford University Press.

Hainmueller, J., Hangartner, D., & Yamamoto, T. (2015). Validating vignette and conjoint survey experiments against real-world behavior. *Proceedings of the National Academy of Sciences*, *112*(8), 2395–2400.

Hainmueller, J., Hopkins, D. J., & Yamamoto, T. (2014). Causal Inference in Conjoint Analysis: Understanding Multidimensional Choices via Stated Preference Experiments. *Political Analysis*, *22*(1), 1–30.

Halperin, E., Canetti-Nisim, D., & Hirsch-Hoefler, S. (2009). The Central Role of Group-Based Hatred as an Emotional Antecedent of Political Intolerance: Evidence from Israel. *Political Psychology*, *30*(1), 93–123.

Harteveld, E. (2021). Fragmented foes: Affective polarization in the multiparty context of the Netherlands. *Electoral Studies*, *71*, 102332.

Harteveld, E., Berntzen, L. E., Kokkonen, A., Kelsall, H., Linde, J., & Dahlberg, S. (2022). The (Alleged) Consequences of Affective Polarization: Individual-Level Evidence & a Survey Experiment in 9 Countries. *OSF Preprints*.

Harteveld, E., & Wagner, M. (2023). Does affective polarisation increase turnout? Evidence from Germany, The Netherlands and Spain. *West European Politics*, *46*(4), 732–759.

Hatemi, P. K., Funk, C. L., Medland, S. E., Maes, H. M., Silberg, J. L., Martin, N. G., & Eaves, L. J. (2009). Genetic and Environmental Transmission of Political Attitudes Over a Life Time. *The Journal of Politics*, *71*(3), 1141–1156.

Hegemann, H., & Kahl, M. (2018). Sicherheit vs. Freiheit? Probleme und Dilemmata der Terrorismusbekämpfung. In H. Hegemann & M. Kahl (Eds.), *Terrorismus und Terrorismusbekämpfung: Eine Einführung* (pp. 169–188). Springer Fachmedien.

Helbling, M., & Meierrieks, D. (2020). Transnational terrorism and restrictive immigration policies. *Journal of Peace Research*, *57*(4), 564–580.

Helbling, M., Meierrieks, D., & Pardos-Prado, S. (2022). Terrorism and Immigration Policy Preferences. *Defence and Peace Economics*, *34*(5), 646–659.

Helbling, M., & Morgenstern, S. (2023). Migration aspirations and the perceptions of the political, economic and social environment in Africa. *International Migration*, *61*(6), 102–117.

Heltzel, G., & Laurin, K. (2020). Polarization in America: Two possible futures. *Current Opinion in Behavioral Sciences*, *34*, 179–184.

Hetherington, M., & Suhay, E. (2011). Authoritarianism, Threat, and Americans' Support for the War on Terror. *American Journal of Political Science*, *55*(3), 546–560.

Hirsch-Hoefler, S., & Mudde, C. (2014). "Ecoterrorism": Terrorist Threat or Political Ploy? *Studies in Conflict & Terrorism*, *37*(7), 586–603.

Huddy, L., Feldman, S., Capelos, T., & Provost, C. (2002). The Consequences of Terrorism: Disentangling the Effects of Personal and National Threat. *Political Psychology*, *23*(3), 485–509.

Huddy, L., Feldman, S., & Cassese, E. (2007). On the distinct political effects of anxiety and anger. In G. E. Marcus, W. R. Neuman, M. MacKuen, & A. N. Crigler (Eds.), *The Affect Effect: Dynamics of Emotion in Political Thinking and Behavior* (pp. 202–230). University of Chicago Press.

Huddy, L., Feldman, S., Taber, C., & Lahav, G. (2005). Threat, Anxiety, and Support of Antiterrorism Policies. *American Journal of Political Science*, *49*(3), 593–608.

Huddy, L., Feldman, S., & Weber, C. (2007). The Political Consequences of Perceived Threat and Felt Insecurity. *The ANNALS of the American Academy of Political and Social Science*, *614*(1), 131–153.

Huddy, L., Mason, L., & Aarøe, L. (2015). Expressive Partisanship: Campaign Involvement, Political Emotion, and Partisan Identity. *American Political Science Review*, *109*(1), 1–17.

Humprecht, E., Amsler, M., Esser, F., & Van Aelst, P. (2024). Emotionalized Social Media Environments: How Alternative News Media and Populist Actors Drive Angry Reactions. *Political Communication*, *41*(4), 559–587.

Imai, K. (2011). Multivariate Regression Analysis for the Item Count Technique. *Journal of the American Statistical Association*, *106*(494), 407–416.

Imai, K., Keele, L., & Tingley, D. (2010). A general approach to causal mediation analysis. *Psychological methods*, *15*(4), 309.

Imai, K., Keele, L., Tingley, D., & Yamamoto, T. (2011). Unpacking the black box of causality: Learning about causal mechanisms from experimental and observational studies. *American Political Science Review*, *105*(4), 765–789.

Imai, K., Keele, L., & Yamamoto, T. (2010). Identification, Inference and Sensitivity Analysis for Causal Mediation Effects. *Statistical Science*, *25*(1), 51–71.

Imai, K., Tingley, D., & Yamamoto, T. (2013). Experimental designs for identifying causal mechanisms. *Journal of the Royal Statistical Society: Series A (Statistics in Society)*, *176*(1), 5–51.

Iyengar, S., Konitzer, T., & Tedin, K. (2018). The Home as a Political Fortress: Family Agreement in an Era of Polarization. *The Journal of Politics*, *80*(4), 1326–1338.

Iyengar, S., Lelkes, Y., Levendusky, M., Malhotra, N., & Westwood, S. J. (2019). The Origins and Consequences of Affective Polarization in the United States. *Annual Review of Political Science*, *22*(7), 1–18.

Jenkins-Smith, H. C., & Herron, K. G. (2009). Rock and a Hard Place: Public Willingness to Trade Civil Rights and Liberties for Greater Security. *Politics & Policy*, *37*(5), 1095–1129.

Jørgensen, F., Bor, A., Lindholt, M. F., & Petersen, M. B. (2021). Public support for government responses against COVID-19: Assessing levels and predictors in eight Western democracies during 2020. *West European Politics*, *44*(5-6), 1129–1158.

Jost, J. T. (2019). Anger and Authoritarianism Mediate the Effects of Fear on Support for the Far Right—What Vasilopoulos et al. (2019) Really Found. *Political Psychology*, *40*(4), 705–711.

Jost, J. T., Baldassarri, D. S., & Druckman, J. N. (2022). Cognitive–motivational mechanisms of political polarization in social-communicative contexts. *Nature Reviews Psychology*, *1*(10), 560–576.

Jost, J. T., Federico, C. M., & Napier, J. L. (2009). Political Ideology: Its Structure, Functions, and Elective Affinities. *Annual Review of Psychology*, *60*(1), 307–337.

Judd, C. M., & Kenny, D. A. (1981). Process Analysis: Estimating Mediation in Treatment Evaluations. *Evaluation Review*, *5*(5), 602–619.

Jungkunz, S. (2021). Political Polarization During the COVID-19 Pandemic. *Frontiers in Political Science*, *3*, 622512.

Kahan, D. M. (2013a). Ideology, motivated reasoning, and cognitive reflection. *Judgment and Decision Making*, *8*(4), 407–424.

Kahan, D. M. (2013b). Ideology, motivated reasoning, and cognitive reflection. *Judgment and Decision Making*, *8*(4), 407–424.

Kahan, D. M. (2015a). The Politically Motivated Reasoning Paradigm, Part 1: What Politically Motivated Reasoning Is and How to Measure It. In R. A. Scott & S. M. Kosslyn (Eds.), *Emerging Trends in the Social and Behavioral Sciences: An Interdisciplinary, Searchable, and Linkable Resource* (1st ed.). Wiley.

Kahan, D. M. (2015b). The Politically Motivated Reasoning Paradigm, Part 2: Unanswered Questions. In R. A. Scott & S. M. Kosslyn (Eds.), *Emerging Trends in the Social and Behavioral Sciences: An Interdisciplinary, Searchable, and Linkable Resource* (1st ed.). Wiley.

Kam, C. D., & Ramos, J. M. (2008). Joining and Leaving the Rally: Understanding the Surge and Decline in Presidential Approval Following 9/11. *Public Opinion Quarterly*, *72*(4), 619–650.

Kawecki, D. (2022). End of consensus? Ideology, partisan identity and affective polarization in Finland 2003–2019. *Preprint SocArXiv*.

Keele, L., Tingley, D., & Yamamoto, T. (2015). Identifying mechanisms behind policy interventions via causal mediation analysis. *Journal of Policy Analysis and Management*, *34*(4), 937–963.

Kekkonen, A., Suuronen, A., Kawecki, D., & Strandberg, K. (2022). Puzzles in affective polarization research: Party attitudes, partisan social distance, and multiple party identification. *Frontiers in Political Science*, *4*.

Kingzette, J., Druckman, J. N., Klar, S., Krupnikov, Y., Levendusky, M., & Ryan, J. B. (2021). How Affective Polarization Undermines Support for Democratic Norms. *Public Opinion Quarterly*, *85*(2), 663–677.

Kline, R. B. (2015). The Mediation Myth. *Basic and Applied Social Psychology*, *37*(4), 202–213.

Koopmans, R., Michalowski, I., & Waibel, S. (2012). Citizenship Rights for Immigrants: National Political Processes and Cross-National Convergence in Western Europe, 1980–2008. *American Journal of Sociology*, *117*(4), 1202–1245.

Kosmidis, S. (2020). Partisanship, policy-making and democracy. In H. Oscarsson & S. Holmberg (Eds.), *Research Handbook on Political Partisanship*. Edward Elgar Publishing.

Kossowska, M., Trejtowicz, M., de Lemus, S., Bukowski, M., Hiel, A. V., & Goodwin, R. (2011). Relationships between right-wing authoritarianism, terrorism threat, and attitudes towards restrictions of civil rights: A comparison among four European countries. *British Journal of Psychology*, *102*, 245–259.

Kring, A. M., & Gordon, A. H. (1998). Sex differences in emotion: Expression, experience, and physiology. *Journal of Personality and Social Psychology*, *74*, 686–703.

Kroh, M. (2009). The preadult origins of postmaterialism: A longitudinal sibling study. *European Journal of Political Research*, *48*(5), 598–621.

Kunda, Z. (1990). The Case for Motivated Reasoning. *Psychological bulletin*, *108*(3), 480–498.

Küntzler, T. (2021). Emotions: Facial Expressions as a Measurement & Effects on Political Attitude. *[Dissertation]*.

Lalonde, R. J. (1986). Evaluating the Econometric Evaluations of Training Programs with Experimental Data. *The American Economic Review*, *Vol. 76*(No. 4), 604–620.

Lambert, A. J., Scherer, L. D., Schott, J. P., Olson, K. R., Andrews, R. K., O'Brien, T. C., & Zisser, A. R. (2010). Rally effects, threat, and attitude change: An integrative approach to understanding the role of emotion. *Journal of Personality and Social Psychology*, *98*(6), 886–903.

Lazarus, R. S. (1991a). Cognition and motivation in emotion. *American Psychologist*, *46*(4), 352–367.

Lazarus, R. S. (1991b). *Emotion and Adaptation*. Oxford University Press.

Lazarus, R. S. (2001). Relational meaning and discrete emotions. In *Appraisal processes in emotion: Theory, methods, research* (pp. 37–67). Oxford University Press.

Leeper, T. J., Hobolt, S. B., & Tilley, J. (2020). Measuring Subgroup Preferences in Conjoint Experiments. *Political Analysis*, *28*(2), 207–221.

Lehrer, R., Bahnsen, O., Müller, K., Neunhoeffer, M., Gschwend, T., & Juhl, S. (2025). Rallying around the leader in times of crises: The opposing effects of perceived threat and anxiety. *European Journal of Political Research*, *64*(2), 697–718.

Lehrer, R., Stöckle, P., & Juhl, S. (2024). Assessing the relative influence of party unity on vote choice: Evidence from a conjoint experiment. *Political Science Research and Methods*, *12*(1), 220–228.

Lehtonen, P., & Aalto, P. (2017). Smart and secure borders through automated border control systems in the EU? The views of political stakeholders in the Member States. *European Security*, *26*(2), 207–225.

Lelkes, Y. (2021). Policy over party: Comparing the effects of candidate ideology and party on affective polarization. *Political Science Research and Methods*, *9*(1), 189–196.

Lerner, J. S., Gonzalez, R. M., Small, D. A., & Fischhoff, B. (2003). Effects of Fear and Anger on Perceived Risks of Terrorism: A National Field Experiment. *Psychological Science*, *14*(2), 144–150.

Lerner, J. S., & Keltner, D. (2000). Beyond valence: Toward a model of emotion-specific influences on judgement and choice. *Cognition and Emotion*, *14*(4), 473–493.

Lerner, J. S., & Keltner, D. (2001). Fear, anger, and risk. *Journal of Personality and Social Psychology*, *81*, 146–159.

Lerner, J. S., Li, Y., Valdesolo, P., & Kassam, K. S. (2015). Emotion and Decision Making. *Annual Review of Psychology*, *66*(1), 799–823.

Little, A. T., Schnakenberg, K. E., & Turner, I. R. (2022). Motivated Reasoning and Democratic Accountability. *American Political Science Review*, *116*(2), 751–767.

Loadenthal, M. (2017). "Eco-Terrorism": An Incident-Driven History of Attack (1973–2010). *Journal for the Study of Radicalism*, *11*(2), 1–34.

Lodge, M., & Taber, C. S. (2013). *The Rationalizing Voter* (1st ed.). Cambridge University Press.

Lupton, R. N., Smallpage, S. M., & Enders, A. M. (2020). Values and Political Predispositions in the Age of Polarization: Examining the Relationship between Partisanship and Ideology in the United States, 1988–2012. *British Journal of Political Science*, *50*(1), 241–260.

MacKuen, M., & Brown, C. (1987). Political Context and Attitude Change. *American Political Science Review*, *81*(2), 471–490.

MacKuen, M., Marcus, G., Neuman, W. R., & Miller, P. R. (2010). Affective Intelligence or Personality? State vs. Trait Influences on Citizens' Use of Political Information. *SSRN Scholarly Paper*.

Malm, A. (2021). *How to Blow Up a Pipeline*. Verso Books.

Manski, C. F. (1995). *Identification problems in the social sciences*. Harvard University Press.

Marcus, G. E. (2021). The Rise of Populism: The Politics of Justice, Anger, and Grievance. In *The Psychology of Populism*. Routledge.

Marcus, G. E. (2023). Evaluating the status of theories of emotion in political science and psychology. *Frontiers in Political Science*, *4*, 1080884.

Marcus, G. E., Neuman, W. R., & MacKuen, M. (2000). *Affective Intelligence and Political Judgment*. University of Chicago Press.

Marcus, G. E., Neuman, W. R., & MacKuen, M. B. (2017). Measuring Emotional Response: Comparing Alternative Approaches to Measurement. *Political Science Research and Methods*, *5*(4), 733–754.

Marcus, G. E., Sullivan, J. L., Theiss-Morse, E., & Stevens, D. (2005). The emotional foundation of political cognition: The impact of extrinsic anxiety on the formation of political tolerance judgments. *Political Psychology*, *26*(6), 949–963.

Marcus, G. E., Sullivan, J. L., Theiss-Morse, E., & Wood, S. L. (1995). *With Malice toward Some: How People Make Civil Liberties Judgments*. Cambridge University Press.

Marcus, G. E., Valentino, N. A., Vasilopoulos, P., & Foucault, M. (2019). Applying the Theory of Affective Intelligence to Support for Authoritarian Policies and Parties. *Political Psychology*, *40*(Suppl. 1), 109–139.

Masch, L. (2020). *Politicians' Expressions of Anger and Leadership Evaluations*. Nomos Verlagsgesellschaft mbH & Co. KG.

Maslow, A. H. (1954). *Motivation And Personality*. Prabhat Prakashan.

McDonald, M. (2008). Securitization and the Construction of Security. *European Journal of International Relations*, *14*(4), 563–587.

Medeiros, D., & Makhashvili, A. (2022). United in Grief? Emotional Communities Around the Far-Right Terrorist Attack in Hanau. *Media and Communication*, *10*, 39–49.

Miller, D. A., Cronin, T., Garcia, A. L., & Branscombe, N. R. (2009). The Relative Impact of Anger and Efficacy on Collective Action is Affected by Feelings of Fear. *Group Processes & Intergroup Relations*, *12*(4), 445–462.

Miller, J. M., & Krosnick, J. A. (2004). Threat as a Motivator of Political Activism: A Field Experiment. *Political Psychology*, *25*(4), 507–523.

Miratrix, L. W., Sekhon, J. S., Theodoridis, A. G., & Campos, L. F. (2018). Worth Weighting? How to Think About and Use Weights in Survey Experiments. *Political Analysis*, *26*(3), 275–291.

Mondak, J. J., & Hurwitz, J. (2012). Examining the Terror Exception: Terrorism and Commitments to Civil Liberties. *Public Opinion Quarterly*, *76*(2), 193–213.

Mondak, J. J., & Halperin, K. D. (2008). A Framework for the Study of Personality and Political Behaviour. *British Journal of Political Science*, *38*(2), 335–362.

Moors, A. (2017). Appraisal Theory of Emotion. In V. Zeigler-Hill & T. K. Shackelford (Eds.), *Encyclopedia of Personality and Individual Differences* (pp. 1–9). Springer International Publishing.

Müller, U. W. D., Bahnsen, O., & Alpers, G. W. (2022). State anxiety by itself does not change political attitudes: A threat of shock experiment. *Frontiers in Psychology*, *13*, 1006757.

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.

Neuman, W. R., Marcus, G. E., & MacKuen, M. B. (2018). Hardwired for News: Affective Intelligence and Political Attention. *Journal of Broadcasting & Electronic Media*, *62*(4), 614–635.

Neyman, J., Dabrowska, D. M., & Speed, T. P. ([1923] 1990). On the Application of Probability Theory to Agricultural Experiments. Essay on Principles. Section 9. *Statistical Science*, *5*(4), 465–472.

Nguyen, C. (2019). Emotions and Populist Support.

Nicholson, S. P. (2011). Dominating Cues and the Limits of Elite Influence. *The Journal of Politics*, *73*(4), 1165–1177.

Nicholson, S. P. (2012). Polarizing Cues. *American Journal of Political Science*, *56*(1), 52–66.

Niemi, R. G., & Sobieszek, B. I. (1977). Political Socialization. *Annual Review of Sociology*, *3*, 209–233.

O'Cinneide, C. (2018). Chapter 7.1: Human rights and civil liberties. In *The UK's Changing Democracy*. LSE Press.

Oesch, D., & Rennwald, L. (2018). Electoral competition in Europe's new tripolar political space: Class voting for the left, centre-right and radical right. *European Journal of Political Research*, *57*(4), 783–807.

Oshri, O., Yair, O., & Huddy, L. (2022). The importance of attachment to an ideological group in multi-party systems: Evidence from Israel. *Party Politics*, *28*(6), 1164–1175.

Peffley, M., Knigge, P., & Hurwitz, J. (2001). A Multiple Values Model of Political Tolerance. *Political Research Quarterly*, *54*(2), 379–406.

Petersen, M. B. (2010). Distinct Emotions, Distinct Domains: Anger, Anxiety and Perceptions of Intentionality. *The Journal of Politics*, *72*(2), 357–365.

Phan, K. L., Wager, T., Taylor, S., & Liberzon, I. (2004). Functional Neuroimaging Studies of Human Emotions. *CNS spectrums*, *9*, 258–66.

Pickard, H., Efthyvoulou, G., & Bove, V. (2023). What's left after right-wing extremism? The effects on political orientation. *European Journal of Political Research*, *62*, 338–351.

Pink, S. L., Chu, J., Druckman, J. N., Rand, D. G., & Willer, R. (2021). Elite party cues increase vaccination intentions among Republicans. *Proceedings of the National Academy of Sciences*, *118*(32).

Preacher, K. J., & Hayes, A. F. (2004). SPSS and SAS procedures for estimating indirect effects in simple mediation models. *Behavior Research Methods, Instruments, & Computers*, *36*(4), 717–731.

Pronin, E., Kennedy, K., & Butsch, S. (2006). Bombing Versus Negotiating: How Preferences for Combating Terrorism Are Affected by Perceived Terrorist Rationality. *Basic and Applied Social Psychology*, *28*(4), 385–392.

Reiljan, A. (2020). 'Fear and loathing across party lines' (also) in Europe: Affective polarisation in European party systems. *European Journal of Political Research*, *59*(2), 376–396.

Reiljan, A., Garzia, D., Silva, F. F. D., & Trechsel, A. H. (2024). Patterns of Affective Polarization toward Parties and Leaders across the Democratic World. *American Political Science Review*, *118*(2), 654–670.

Richards, B. (2004). The Emotional Deficit in Political Communication. *Political Communication*, *21*(3), 339–352.

Robins, J. M., & Greenland, S. (1992). Identifiability and Exchangeability for Direct and Indirect Effects. *Epidemiology*, *3*(2), 143–155.

Rohde, I. M. T., & Rohde, K. I. M. (2011). Risk attitudes in a social context. *Journal of Risk and Uncertainty*, *43*(3), 205–225.

Romer, T., & Rosenthal, H. (1978). Political Resource Allocation, Controlled Agendas, and the Status Quo. *Public Choice*, *33*(4), 27–43.

Roseman, I. J. (1984). Cognitive determinants of emotion: A structural theory. *Review of Personality & Social Psychology*, *5*, 11–36.

Rosenbaum, P. R. (1984). Conditional Permutation Tests and the Propensity Score in Observational Studies. *Journal of the American Statistical Association*, *79*(387), 565–574.

Rovny, J., Bakker, R., Hooghe, L., Jolly, S., Marks, G., Polk, J., Steenbergen, M., & Vachudova, M. (2025). *25 Years of Political Party Positions in Europe: The Chapel Hill Expert Survey, 1999-2024* (Working Paper).

Rubin, D. B. (2005). Causal Inference Using Potential Outcomes: Design, Modeling, Decisions. *Journal of the American Statistical Association*, *100*(469), 322–331.

Ruby, C. L. (2002). The Definition of Terrorism. *Analyses of Social Issues and Public Policy*, *2*(1), 9–14.

Rudolph, L., Freitag, M., & Thurner, P. W. (2024). Ordering Effects versus Cognitive Burden: How Should We Structure Attributes in Conjoint Experiments? *Public Opinion Quarterly*, *88*(3), 991–1016.

Rudolph, T. (2021). Populist anger, Donald Trump, and the 2016 election. *Journal of Elections, Public Opinion and Parties*, *31*(1), 33–58.

Rykkja, L. H., Lægreid, P., & Lise Fimreite, A. (2011). Attitudes towards anti-terror measures: The role of trust, political orientation and civil liberties support. *Critical Studies on Terrorism*, *4*(2), 219–237.

Saikkonen, I. A.-L., & Christensen, H. S. (2022). Guardians of Democracy or Passive Bystanders? A Conjoint Experiment on Elite Transgressions of Democratic Norms. *Political Research Quarterly*, *76*(1), 127–142.

Sapiro, V. (2004). NOT YOUR PARENTS' POLITICAL SOCIALIZATION: Introduction for a New Generation. *Annual Review of Political Science*, *7*, 1–23.

Sauer, C., Auspurg, K., & Hinz, T. (2020). Designing Multi-Factorial Survey Experiments: Effects of Presentation Style (Text or Table), Answering Scales, and Vignette Order. *methods, data, analyses*, *Vol. 14(2)*, 195–214.

Schmid, A. P. (2011). *The Routledge Handbook of Terrorism Research*. Taylor & Francis.

Schneider, M. C., & Bos, A. L. (2019). The Application of Social Role Theory to the Study of Gender in Politics. *Political Psychology*, *40*(Suppl. 1), 173–213.

Schoemann, A. M., Boulton, A. J., & Short, S. D. (2017). Determining Power and Sample Size for Simple and Complex Mediation Models. *Social Psychological and Personality Science*, *8*(4), 379–386.

Searing, D., Wright, G., & Rabinowitz, G. (1976). The Primacy Principle: Attitude Change and Political Socialization. *British Journal of Political Science*, *6*(1), 83–113.

Sears, D. O., Lau, R. R., Tyler, T. R., & Allen, H. M. (1980). Self-Interest vs. Symbolic Politics in Policy Attitudes and Presidential Voting. *American Political Science Review*, *74*(3), 670–684.

Selvin, H. C., & Hagstrom, W. O. (1960). Determinants of Support for Civil Liberties. *The British Journal of Sociology*, *11*(1), 51–73.

Siri, J. (2018). The Alternative for Germany after the 2017 Election. *German Politics*, *27*(1), 141–145.

Sjölander, A. (2009). Bounds on natural direct effects in the presence of confounded intermediate variables. *Statistics in Medicine*, *28*(4), 558–571.

Skitka, L. J., Bauman, C. W., Aramovich, N. P., & Morgan, G. S. (2006). Confrontational and Preventative Policy Responses to Terrorism: Anger Wants a Fight and Fear Wants ”Them” to Go Away. *Basic and Applied Social Psychology*, *28*(4), 375–384.

Slothuus, R., & de Vreese, C. H. (2010). Political Parties, Motivated Reasoning, and Issue Framing Effects. *The Journal of Politics*, *72*(3), 630–645.

Small, D. A., & Lerner, J. S. (2008). Emotional Policy: Personal Sadness and Anger Shape Judgments about a Welfare Case. *Political Psychology*, *29*(2), 149–168.

Smith, C. A., & Ellsworth, P. C. (1985). Patterns of cognitive appraisal in emotion. *Journal of Personality and Social Psychology*, *48*(4), 813–838.

Smith, R. K. (2008). “ECOTERRORISM”?: A CRITICAL ANALYSIS OF THE VILIFICATION OF RADICAL ENVIRONMENTAL ACTIVISTS AS TERRORISTS. *ENVIRONMENTAL LAW*, *38*, 537–576.

Somer, M., & McCoy, J. (2018). Déjà vu? Polarization and Endangered Democracies in the 21st Century. *American Behavioral Scientist*, *62*(1), 3–15.

Spencer, S. J., Zanna, M. P., & Fong, G. T. (2005). Establishing a causal chain: Why experiments are often more effective than mediational analyses in examining psychological processes. *Journal of Personality and Social Psychology*, *89*(6), 845–851.

Steenbergen, M. R. (2020). Partisan ambivalence in multi-party systems. In H. Oscarsson & S. Holmberg (Eds.), *Research Handbook on Political Partisanship*. Edward Elgar Publishing.

Stewart, P. A., Salter, F. K., & Mehu, M. (2011). The Face as a Focus of Political Communication: Evolutionary Perspectives and the Ethological Method. In E. P. Bucy & R. L. Holbert (Eds.), *The Sourcebook for Political Communication Research. Methods, Measures, and Analytical Techniques*. (pp. 165–193). Routledge.

Stimson, J. A. (1975). Belief Systems: Constraint, Complexity, and the 1972 Election. *American Journal of Political Science*, *19*(3), 393–417.

Stoetzer, L. F., Munzert, S., Lowe, W., Çalı, B., Gohdes, A. R., Helbling, M., Maxwell, R., & Traunmüller, R. (2023). Affective partisan polarization and moral dilemmas during the COVID-19 pandemic. *Political Science Research and Methods*, *11*(2), 429–436.

Strack, F., Schwarz, N., & Gschneidinger, E. (1985). Happiness and Reminiscing. The Role of Time Perspective, Affect, and Mode of Thinking. *Journal of Personality and Social Psychology*, *49*, 1460–1469.

Sullivan, J. L., & Hendriks, H. (2009). Public Support for Civil Liberties Pre- and Post-9/11. *Annual Review of Law and Social Science*, *5*(1), 375–391.

Svolik, M. W. (2019). Polarization versus Democracy. *Journal of Democracy*, *30*(3), 20–32.

Taber, C. S., & Lodge, M. (2006). Motivated Skepticism in the Evaluation of Political Beliefs. *American Journal of Political Science*, *50*(3), 755–769.

Tajfel, H. (1981). *Human groups and social categories : Studies in social psychology*.

Tappin, B. M., Pennycook, G., & Rand, D. G. (2020). Thinking clearly about causal inferences of politically motivated reasoning: Why paradigmatic study designs often undermine causal inference. *Current Opinion in Behavioral Sciences*, *34*, 81–87.

Tappin, B. M., Pennycook, G., & Rand, D. G. (2021). Rethinking the link between cognitive sophistication and politically motivated reasoning. *Journal of Experimental Psychology: General*, *150*(6), 1095–1114.

Tesler, M. (2015). Priming Predispositions and Changing Policy Positions: An Account of When Mass Opinion Is Primed or Changed. *American Journal of Political Science*, *59*(4), 806–824.

Tiedens, L. Z., & Linton, S. (2001). Judgment under emotional certainty and uncertainty: The effects of specific emotions on information processing. *Journal of Personality and Social Psychology*, *81*(6), 973–988.

Tingley, D., Yamamoto, T., Hirose, K., Keele, L., & Imai, K. (2014). **Mediation** : *R* Package for Causal Mediation Analysis. *Journal of Statistical Software*, *59*(5).

Todd, A. R., Forstmann, M., Burgmer, P., Brooks, A. W., & Galinsky, A. D. (2015). Anxious and egocentric: How specific emotions influence perspective taking. *Journal of Experimental Psychology: General*, *144*(2), 374–391.

Toff, B., & Suhay, E. (2019). Partisan Conformity, Social Identity, and the Formation of Policy Preferences. *International Journal of Public Opinion Research*, *31*(2), 349–367.

Tooby, J., Cosmides, L., Sell, A., Lieberman, D., Sznycer, D., & Elliot, A. J. (2008). Internal regulatory variables and the design of human motivation: A computational and evolutionary approach. In *Handbook of approach and avoidance motivation* (pp. 251–271, Vol. 15). Psychology Press.

Trepte, S., & Masur, P. K. (2017). *Privacy attitudes, perceptions, and behaviors of the German population* (tech. rep.). Unpublished.

Trüdinger, E.-M. (2019). Perceptions of threat and policy attitudes : The case of support for anti-terrorism policies in Germany. *Habilitation*.

Trüdinger, E.-M., & Ziller, C. (2022). Considered effective? How policy evaluations and threat perceptions affect support for surveillance in the context of terrorism. *Politics & Policy*, *50*(5), 894–912.

Urman, A. (2020). Context matters: Political polarization on Twitter from a comparative perspective. *Media, Culture & Society*, *42*(6), 857–879.

Valentim, V., Dinas, E., & Ziblatt, D. (2025). How Mainstream Politicians Erode Norms. *British Journal of Political Science*, *55*(e105), 1–10.

Valentino, N. A., Brader, T., Groenendyk, E. W., Gregorowicz, K., & Hutchings, V. L. (2011). Election Night's Alright for Fighting: The Role of Emotions in Political Participation. *The Journal of Politics*, *73*(1), 156–170.

Valentino, N. A., Hutchings, V. L., Banks, A. J., & Davis, A. K. (2008). Is a Worried Citizen a Good Citizen? Emotions, Political Information Seeking, and Learning via the Internet. *Political Psychology*, *29*(2), 247–273.

Valentino, N. A., Neuner, F. G., & Vandenbroek, L. M. (2018). The Changing Norms of Racial Political Rhetoric and the End of Racial Priming. *The Journal of Politics*, *80*(3), 757–771.

van Leeuwen, M. (2003). Democracy versus Terrorism: Balancing Security and Fundamental Rights. In M. van Leeuwen (Ed.), *Confronting Terrorism* (pp. 227–233). Brill | Nijhoff.

Vanagt, J., Praprotnik, K., Russo, L., & Wagner, M. (2024). Affective Polarization Among Radical-Right Supporters: Dislike Differentiation and Democratic Support. *Politics and Governance*, *12*, 8531.

Vasilopoulos, P., Marcus, G. E., Valentino, N. A., & Foucault, M. (2019). Fear, Anger, and Voting for the Far Right: Evidence From the November 13, 2015 Paris Terror Attacks. *Political Psychology*, *40*(4), 679–704.

Vasilopoulos, P., Mcavay, H., Brouard, S., & Foucault, M. (2023). Emotions, governmental trust and support for the restriction of civil liberties during the covid-19 pandemic. *European Journal of Political Research*, *62*(2), 422–442.

Vergani, M. (2018). *How Is Terrorism Changing Us?* Springer Singapore.

Wagner, M. (2014). Fear and Anger in Great Britain: Blame Assignment and Emotional Reactions to the Financial Crisis. *Political Behavior*, *36*(3), 683–703.

Wagner, M. (2021). Affective polarization in multiparty systems. *Electoral Studies*, *69*, 102199.

Waldner, D., & Lust, E. (2018). Unwelcome Change: Coming to Terms with Democratic Backsliding. *Annual Review of Political Science*, *21*(1), 93–113.

Weaver, D. (1991). ISSUE SALIENCE AND PUBLIC OPINION: ARE THERE CONSEQUENCES OF AGENDA-SETTING? *International Journal of Public Opinion Research*, *3*(1), 53–68.

Welzel, C. (2007). Are Levels of Democracy Affected by Mass Attitudes? Testing Attainment and Sustainment Effects on Democracy. *International Political Science Review*, *28*(4), 397–424.

Welzel, C., & Inglehart, R. F. (2009). Political Culture, Mass Beliefs, and Value Change. In C. W. Haerpfer, P. Bernhagen, R. F. Inglehart, & C. Welzel (Eds.), *Democratization* (pp. 126–144). Oxford University Press.

Wright, G. C., Erikson, R. S., & McIver, J. P. (1985). Measuring State Partisanship and Ideology with Survey Data. *The Journal of Politics*, *47*(2), 469–489.

Wynter, T. (2017). Counterterrorism, Counterframing, and Perceptions of Terrorist (Ir)rationality. *Journal of Global Security Studies*, *2*(4), 364–376.

Zahariadis, N. (2003). *Ambiguity and Choice in Public Policy: Political Decision Making in Modern Democracies*. Georgetown University Press.

Zalkind, S. S. (1975). Civil Liberties: An Overview of Some Contributions from the Behavioral Sciences. *Journal of Social Issues*, *31*(2), 1–12.

Zaller, J. R. (1992). *The nature and origins of mass opinion*. Cambridge university press.

Ziller, C., & Helbling, M. (2021). Public support for state surveillance. *European Journal of Political Research*, (60), 994–1006.

Appendices

Appendix A

Chapter 1

A.1 Treatment

Terrorist motivation	right-wing
	climate-radical
	Islamic
	(control)
Terrorist threat	personal danger
	no personal danger
	(control)
Policy proposing party	AfD
	The Greens
	(control)
Policy	targeted
	dragnet
	(control)

Table A.1: Treatment dimensions and attributes.

A.1.1 Treatment text in English:

Imagine that a terrorist attack conducted by *(Motivation:) a right-wing group / Islamic group / climate-radical activists / control* takes place. An explosion occurs, injuring several people. *(Threat:) There is a serious danger for citizens like you, your family and*

friends / There is no serious danger for citizens like you, your family and friends / control.

To ensure that attacks like this are prevented in the future, politicians from *(Party:) The AfD / The Greens / control* want to increase surveillance measures. *(Policy:) These measures shall target every citizen in the country / these measures should target only suspicious individuals and groups / control*. The measure includes the monitoring of telephone calls, letter mail, e-mails and social media accounts, as well as chats on cell phones or smartphones.

A.1.2 Treatment text in German:

Stellen Sie sich vor, es findet ein Terroranschlag *(Motivation:) einer rechtsradikalen Gruppe / einer islamistischen Gruppe / radikaler Klimaaktivisten / control* statt. Es kommt zu einer Explosion, bei der mehrere Menschen verletzt werden. *(Threat:) Es besteh eine ernsthafte Gefahr für Bürger wie Sie, Ihre Familie und Freunde / Es besteht keine ernsthafte Gefahr für Bürger wie Sie, Ihre Familie und Freunde / control*.

Um sicherzustellen, dass Anschläge wie dieser in Zukunft verhindert werden, wollen Politiker *(Party:) der AfD / der Grünen / control* die Überwachungsmaßnahmen verstärken. *(Policy:) Diese Maßnahmen sollen jeden Bürger im Land ins Visier nehmen / Diese Maßnahmen sollen verdächtigen Gruppen und Einzelpersonen ins Visier nehmen / control*. Die Maßnahmen beinhalten die Überwachung von Telefonaten, Briefpost, E-Mails und Social-Media-Accounts sowie Chats auf Mobiltelefonen bzw. Smartphones.

A.2 Questionnaire in order as asked in the survey

A.2.1 English

Pre treatment

- (Environment 1) How much do you feel a personal responsibility to help reduce climate change? (1- Not at all to 10 - Very much)

- (Environment 2) How willing are you to drive less often to help people whose lives are greatly affected by climate change? (1 - No willingness at all to 10 - Very high willingness)
- (Environment 3) Attitude toward environmental sustainability? (0 - Strong support for environmental protection even at the expense of economic growth; 10 - Strong support for economic growth even at the expense of environmental protection)
- (Extremism 1) How much do you agree with each of the following statements? a) Despite its disadvantages, democracy is the best system of government (1 - Do not agree at all to 10 - Fully agree)
- (Extremism 2) b) A strong non-democratic leader who does not care about parliament and elections is a good way to rule my country (1 - Do not agree at all to 10 - Fully agree)
- (Fearfulness 1) How safe do you feel walking alone in your neighborhood in the evening? (1 - very unsafe to 10 - very safe)
- (Fearfulness 2) To what extent do you agree with the following statement: I fear an increase in violence and vandalism in my neighborhood (1 - strongly disagree to 10 - strongly agree)
- (Propensity to violence 1) Sometimes it is necessary to use violence to fight against things that are very unfair. (1 - Do not agree at all to 10 - Fully agree)
- (Propensity to violence 2) Sometimes people need to resort to violence to defend their values, beliefs, or religious faith. (1 - Do not agree at all to 10 - Fully agree)
- (Propensity to violence 3) It is okay to support groups that use violence to fight injustice. (1 - Do not agree at all to 10 - Fully agree)
- (Propensity to violence 4) Sometimes it is necessary to use violence, commit attacks, or kidnap people to fight for a better world. (1 - Do not agree at all to 10 - Fully agree)

- (prior probability of threat on a societal level) How likely do you think it is that there will be a terrorist attack on German soil in the future? (1 - not at all likely to 10 - very likely)
- (Party vote) If there were a federal election next Sunday, which party would you vote for? (AfD, CDU/CSU, FDP, SPD, The Greens, The Left, Others)
- (Affection towards parties) How strongly do you feel inclined or disinclined to the following parties? (1 - very strongly disinclined to 10 - very strongly inclined)
- (Left-Right) Where would you rank your political views on a scale from left to right? (1 - left to 10 - right)

Treatment (see section A.1)

Post treatment

- (Policy Support (Main DV)) To what extent do you support the surveillance measure? (1 - do not support at all to 10 - support very strongly).
- (Measure of Effectiveness) Do you think this measure would be effective in preventing future terrorist attacks? (1 - not at all effective to 10 - very effective)
- (Measure Objective) Do you feel that the surveillance measure would limit you, your friends, or your family? (1 - don't feel restricted at all to 10 - feel very restricted).
- (personal concern) How concerned are you personally that you or a family member might become a victim of a terrorist attack in the future? (1 - not at all concerned to 10 - very concerned.)
- (societal concern) How concerned are you that a terrorist attack could occur on German soil in the future? (1 - not at all concerned to 10 - very concerned.)
- (probability of threat from society's point of view) You should just imagine a terrorist attack. Now, how likely do you think it is that there will be a terrorist attack on German soil in the future? (1 - not at all likely to 10 - very likely)

A.2.2 German

Pre treatment

- (Environment 1) Wie sehr fühlen Sie sich persönlich verantwortlich, einen Beitrag zu leisten, damit der Klimawandel reduziert wird? (1 - Überhaupt nicht bis 10 – Sehr stark)

- (Environment 2) Wie groß ist Ihre Bereitschaft weniger oft Auto zu fahren, um Menschen zu helfen, deren Lebensumfeld durch den Klimawandel stark beeinflusst wird? (1 - Überhaupt keine Bereitschaft bis 10 - sehr große Bereitschaft)

- (Environment 3) Einstellung zu ökologischer Nachhaltigkeit? (0 – starke Unterstützung von Umweltschutz auch zu Kosten von wirtschaftlichem Wachstum; 10 – Starke Unterstützung für wirtschaftliches Wachstum auch zu Kosten von Umweltschutz)

- (Extremismus 1) Wie sehr stimmen Sie jeweils den folgenden Aussagen zu? a) Trotz ihrer Nachteile ist die Demokratie das beste Regierungssystem (1 – Stimme überhaupt nicht zu bis 10 – Stimme voll zu)

- (Extremismus 2) b) Ein starker nichtdemokratischer Führer, der sich nicht um Parlament und Wahlen kümmert, ist eine gute Möglichkeit, mein Land zu regieren (1 – Stimme überhaupt nicht zu bis 10 – Stimme voll zu)

- (Ängstlichkeit / Fearfulness 1) Wie sicher fühlen Sie sich wenn Sie Abends alleine durch Ihre Nachbarschaft laufen? (1 – sehr unsicher bis 10 – sehr sicher)

- (Ängstlichkeit / Fearfulness 2) Inwiefern stimmen Sie der folgenden Aussage zu: Ich befürchte einen Anstieg von Gewalt und Vandalismus in meiner Nachbarschaft (1 – stimme gar nicht zu bis 10 – stimme völlig zu)

- (Gewaltbereitschaft 1) Manchmal ist es notwendig Gewalt anzuwenden, um gegen Dinge zu kämpfen, die sehr ungerecht sind. (1 – Stimme überhaupt nicht zu bis 10 – Stimme voll zu)

- (Gewaltbereitschaft 2) Manchmal müssen Menschen auf Gewalt zurückgreifen, um ihre Werte, Überzeugungen oder religiösen Glauben zu verteidigen. (1 – Stimme überhaupt nicht zu bis 10 – Stimme voll zu)

- (Gewaltbereitschaft 3) Es ist in Ordnung Gruppen zu unterstützen, die Gewalt einsetzen, um Ungerechtigkeiten zu bekämpfen. (1 – Stimme überhaupt nicht zu bis 10 – Stimme voll zu)

- (Gewaltbereitschaft 4) Manchmal ist es notwendig, Gewalt anzuwenden, Anschläge zu verüben oder Menschen zu entführen, um für eine bessere Welt zu kämpfen. (1 – Stimme überhaupt nicht zu bis 10 – Stimme voll zu)

- (Vorwahrscheinlichkeit der Bedrohung auf gesellschaftlicher Ebene) Was denken Sie, wie wahrscheinlich ist es, dass es in Zukunft einen Terroranschlag auf deutschem Boden geben wird? (1 - überhaupt nicht wahrscheinlich bis 10 - sehr wahrscheinlich)

- (Party vote) Wenn am nächsten Sonntag Bundestagswahl wäre, welcher Partei würden Sie Ihre Stimme geben? (AfD, CDU/CSU, FDP, SPD, Grüne, Linke, Sonstige)

- (Zuneigung Parteien) Wie stark fühlen Sie sich den folgenden Parteien zugeneigt bzw. abgeneigt? (1 – sehr stark abgeneigt bis 10 – sehr stark zugeneigt)

- (Left-Right) Wo würden Sie Ihre politischen Ansichten auf einer Skala von links bis rechts einordnen? (1 - links bis 10 - rechts)

Treatment (see section A.1)

Post treatment

- (Policy Support (Main DV)) Inwieweit unterstützen Sie die Überwachungsmaßnahme? (1 - überhaupt nicht unterstützen bis 10 – sehr stark unterstützen)

- (Messung der Wirksamkeit) Glauben Sie, dass diese Maßnahme wirksam wäre, um künftige Terroranschläge zu verhindern? (1 - überhaupt nicht wirksam bis 10 - sehr wirksam)

- (Ziel der Maßnahme) Haben Sie das Gefühl, dass die Überwachungsmaßnahme Sie, Ihre Freunde oder Ihre Familie einschränken würde? (1 - fühle mich überhaupt nicht eingeschränkt bis 10 – fühle mich sehr stark eingeschränkt)

- (persönliche Sorge) Wie groß ist Ihre persönliche Sorge, dass Sie selbst oder ein Familienmitglied in Zukunft Opfer eines Terroranschlags werden könnten? (1 - überhaupt nicht besorgt bis 10 - sehr besorgt.)

- (gesellschaftliche Sorge) Wie groß ist Ihre Sorge, dass es in Zukunft zu einem Terroranschlag auf deutschem Boden kommen könnte? (1 - überhaupt nicht besorgt bis 10 - sehr besorgt.)

- (Wahrscheinlichkeit der Bedrohung aus gesellschaftlicher Sicht) Sie sollten sich eben einen Terroranschlag vorstellen. Was denken Sie nun, wie wahrscheinlich ist es, dass es in Zukunft einen Terroranschlag auf deutschem Boden geben wird? (1 - überhaupt nicht wahrscheinlich bis 10 - sehr wahrscheinlich)

A.3 Descriptive statistics

A.3.1 Sample statistics

Variable	**Levels**	**n**	%	∑%
Age	18-29	359	17.6	17.6
	30-39	349	17.2	34.8
	40-49	332	16.3	51.1
	50-59	445	21.9	73.0
	60-75	486	23.9	96.9
	75+	59	2.9	99.8
	Other	4	0.2	100.0
	all	2034	100.0	
Gender	male	1064	52.1	52.1
	female	974	47.7	99.8
	divers	5	0.2	100.0
	all	2043	100.0	
Education	low	609	29.8	29.8
	medium	673	33.0	62.8
	high	736	36.0	98.8
	Other	19	0.9	99.8
	Don’t know	5	0.2	100.0
	all	2042	100.0	

Table A.2: Distribution of demographic variables within the sample.

A.3.2 Balance checks

	Vignette	N	Age	Gender	High education	Left-Right
1	control threat	683	47.59 (0.62)	1.46 (0.02)	0.36 (0.02)	4.87 (0.08)
2	no threat	682	47.62 (0.61)	1.49 (0.02)	0.34 (0.02)	4.78 (0.08)
3	threat	680	47.6 (0.63)	1.48 (0.02)	0.38 (0.02)	4.86 (0.08)

Table A.3: Balance check for treatment dimension threat.

	Vignette	N	Age	Gender	High educ.	Left-Right
1	control motivation	516	47.15 (0.71)	1.47 (0.02)	0.36 (0.02)	4.96 (0.09)
2	Islamist	507	47.04 (0.71)	1.48 (0.02)	0.39 (0.02)	4.91 (0.09)
3	radical climate	509	48.11 (0.73)	1.49 (0.02)	0.35 (0.02)	4.75 (0.08)
4	right wing	513	48.11 (0.72)	1.47 (0.02)	0.34 (0.02)	4.73 (0.09)

Table A.4: Balance check for treatment dimension terrorist motivation.

	Vignette	N	Age	Gender	High education	Left-Right
1	control_policy	691	48.18 (0.6)	1.47 (0.02)	0.33 (0.02)	4.9 (0.08)
2	dragnet	670	47.08 (0.65)	1.49 (0.02)	0.37 (0.02)	4.82 (0.08)
3	targeted	684	47.53 (0.62)	1.47 (0.02)	0.38 (0.02)	4.79 (0.08)

Table A.5: Balance check for treatment dimension scope of surveillance policy.

	Vignette	N	Age	Gender	High educ.	Left-Right
1	control party	677	47.45 (0.63)	1.47 (0.02)	0.36 (0.02)	4.89 (0.08)
2	policy from AfD	684	47.72 (0.62)	1.47 (0.02)	0.36 (0.02)	4.8 (0.08)
3	policy from Greens	684	47.64 (0.62)	1.49 (0.02)	0.35 (0.02)	4.82 (0.08)

Table A.6: Balance check for treatment dimension policy proposing party.

A.3.3 Group sizes of the interaction analyses

	dragnet	targeted
no threat	218	224
threat	241	230

Table A.7: Group size of values shown in Figure 1.2 / chapter 1 hypothesis H1c.

	The Greens	AfD
neutral	243	105
pro	150	76
anti	253	478

Table A.8: Group size of values shown in Figure 1.3 / chapter 1 hypothesis H2a.

	The Greens - climate-radical	AfD - right-wing
Neutral	183	76
Pro	106	63
Anti	193	343

Table A.9: Group size of values shown in Figure 1.4 / chapter 1 hypothesis H2b.

	Anti Greens	Anti AfD
Control	87	165
No pers. threat	93	154
Pers. threat	73	159

Table A.10: Group size of values shown in Figure 1.5 / chapter 1 hypothesis H3a.

	Pro Greens	Pro AfD
Control	45	28
Dragnet	58	23
Targeted	47	25

Table A.11: Group size of values shown in Figure 1.6 / chapter 1 hypothesis H3b.

A.3.4 Distributions of support for surveillance (DV) and party preference

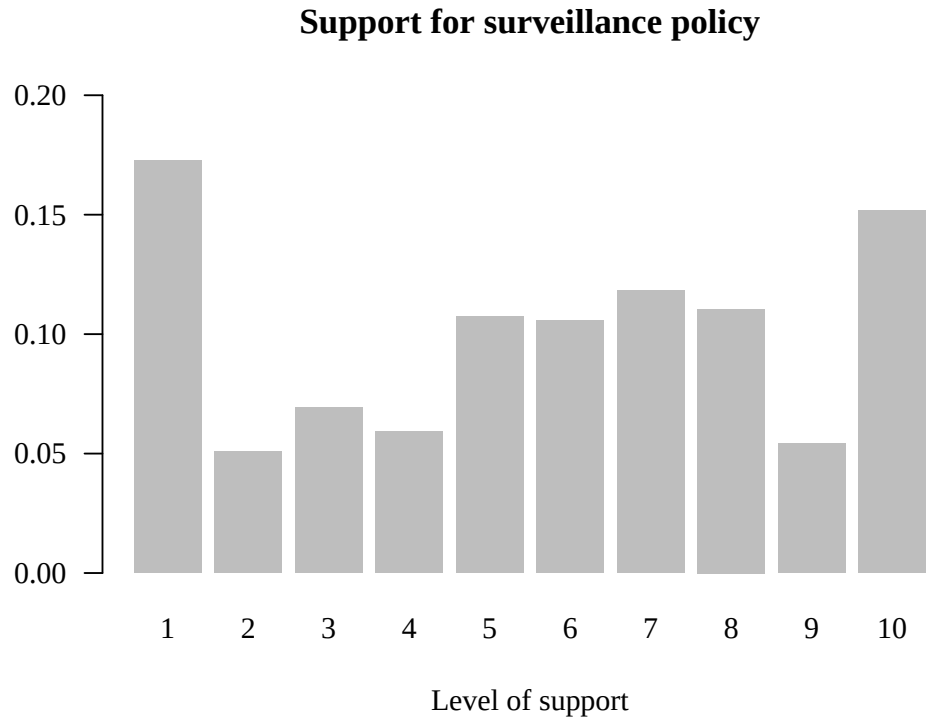


Figure A.1: Distribution of the support for the surveillance policy (1 indicates no support, 10 very strong support).

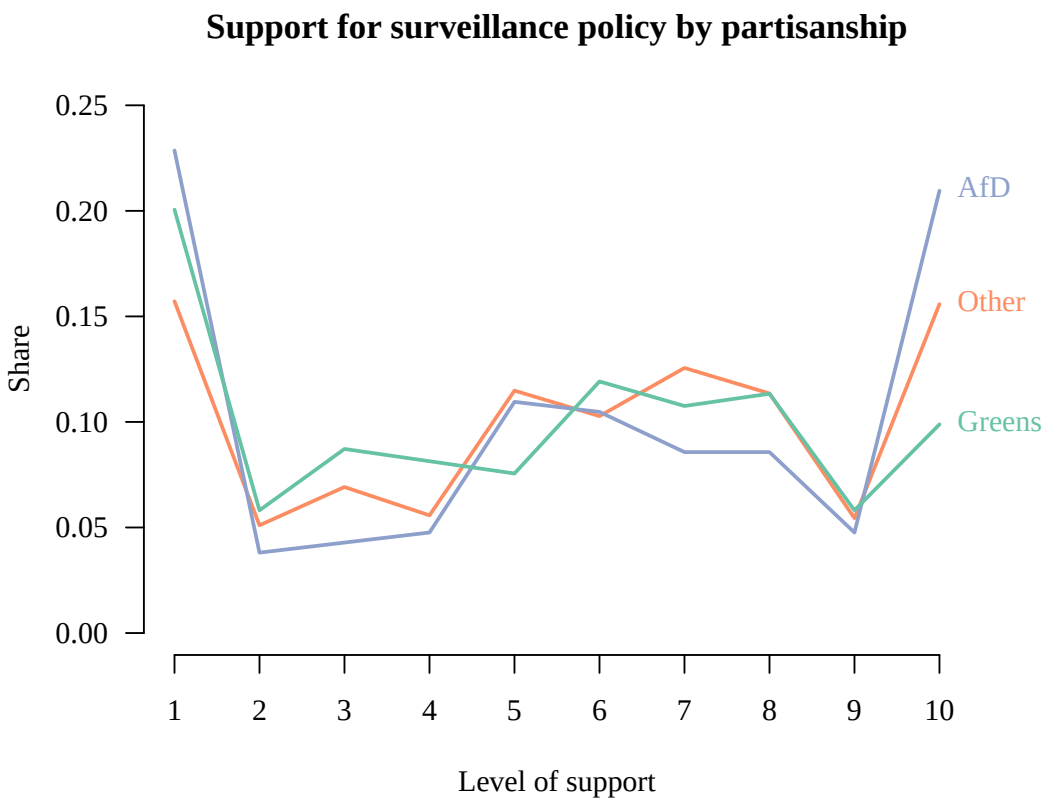


Figure A.2: Distribution of the support for the surveillance policy (1 indicates no support, 10 very strong support) based on respondents preferred party (AfD, Greens, Other).

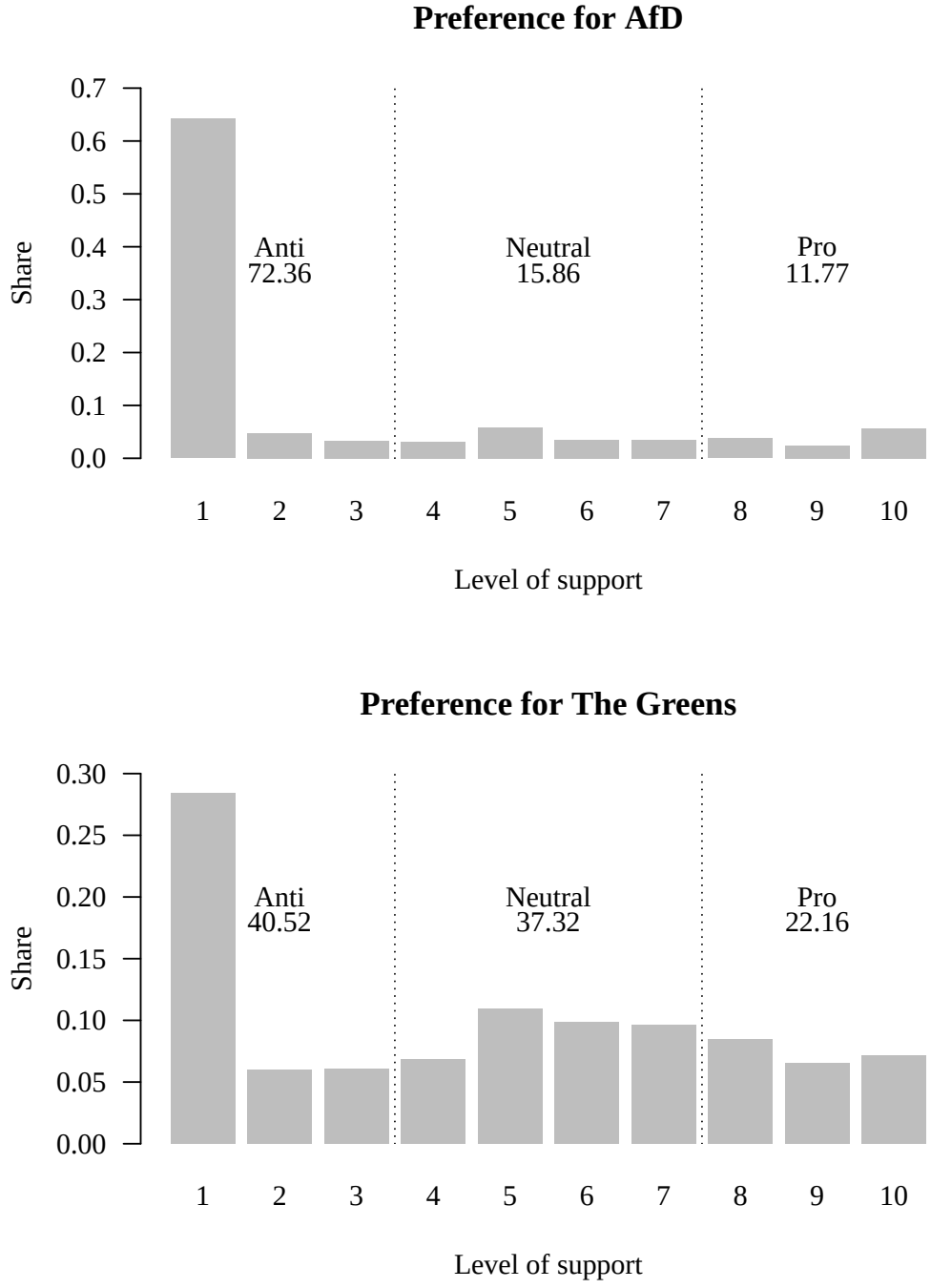


Figure A.3: Distribution of the inclination and disinclination towards the AfD and The Greens.

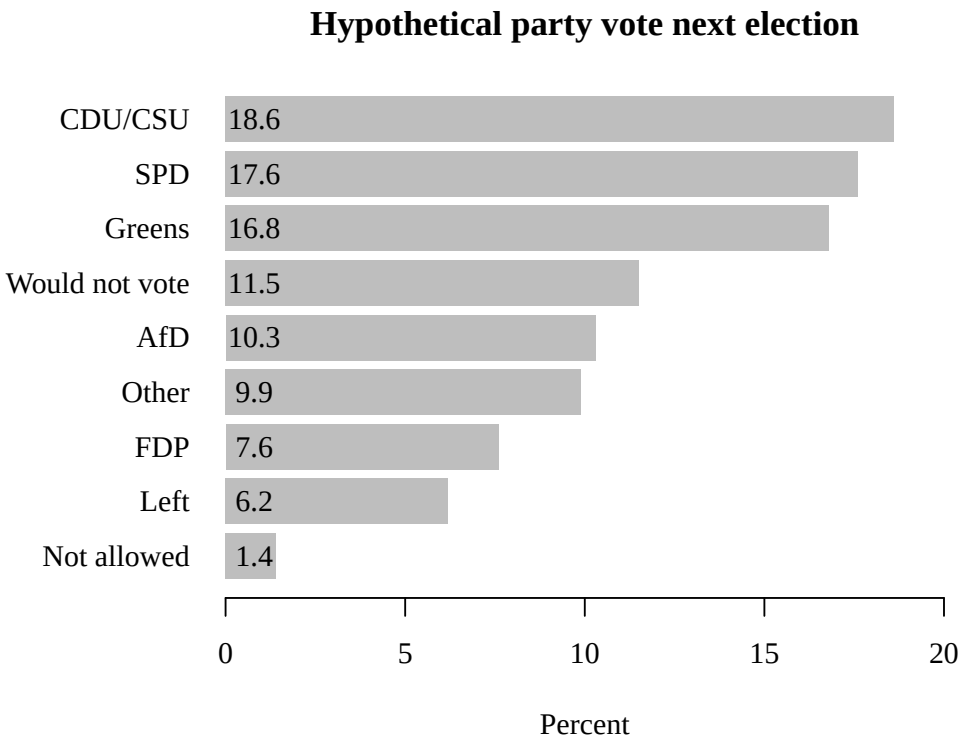


Figure A.4: Distribution of the hypothetical party vote.

A.4 Results & additional analysis

Table A.12: Results from OLS regression of the four treatment dimensions on the support for surveillance.

	Dependent variable:
	surveillance policy
threat no personal threat	0.004 (0.163)
threat personal threat	0.016 (0.163)
policy scope dragnet	−0.570*** (0.164)
policy scope targeted	0.661*** (0.163)
motivation Islamist	0.282 (0.188)
motivation radical climate	−0.154 (0.188)
motivation right-wing	−0.264 (0.188)
party policy from AfD	−0.906*** (0.164)
party policy from The Greens	−0.490*** (0.163)
Constant	6.068*** (0.208)
Observations	2,045
R^2	0.046
Adjusted R^2	0.041
Residual Std. Error	3.006 (df = 2035)
F Statistic	10.804*** (df = 9; 2035)
Note:	*p<0.1; **p<0.05; ***p<0.01

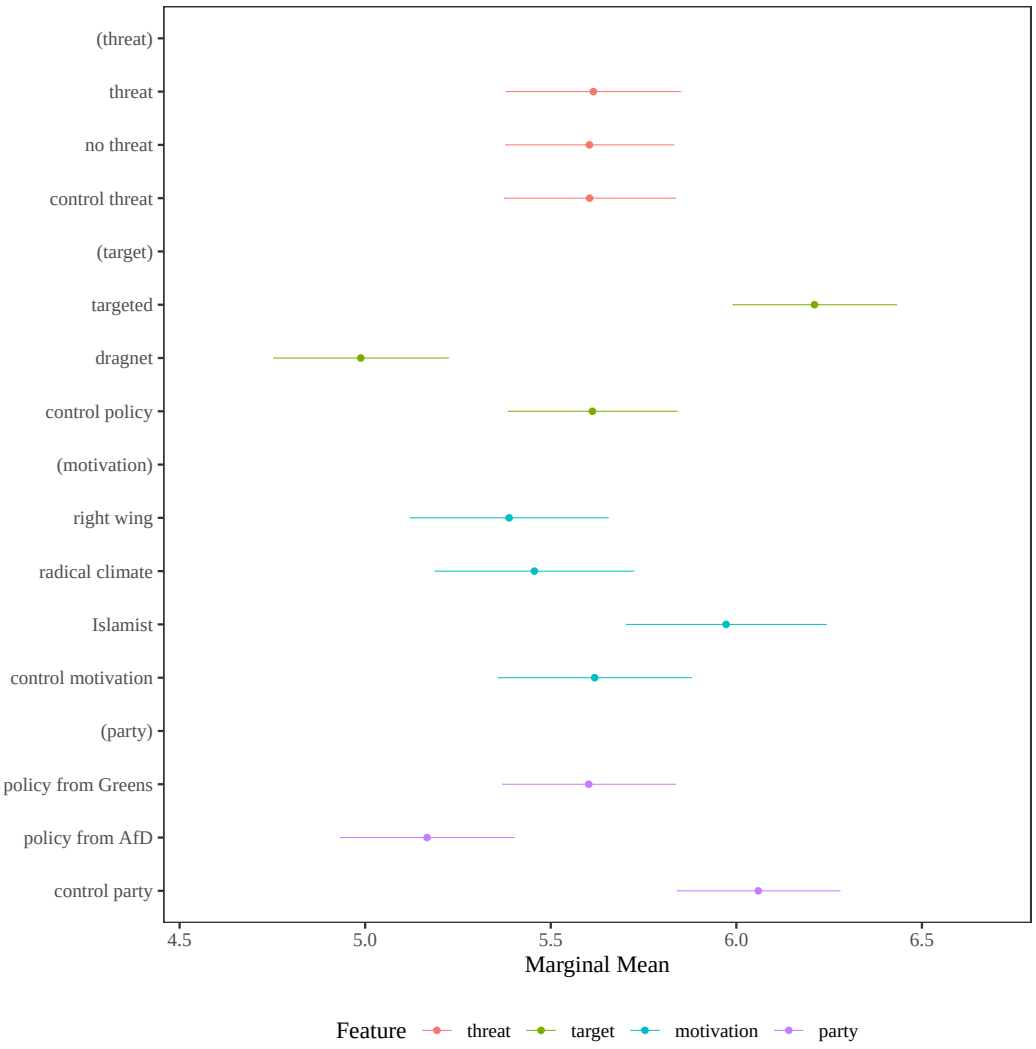


Figure A.5: Marginal means for the main treatment effects.

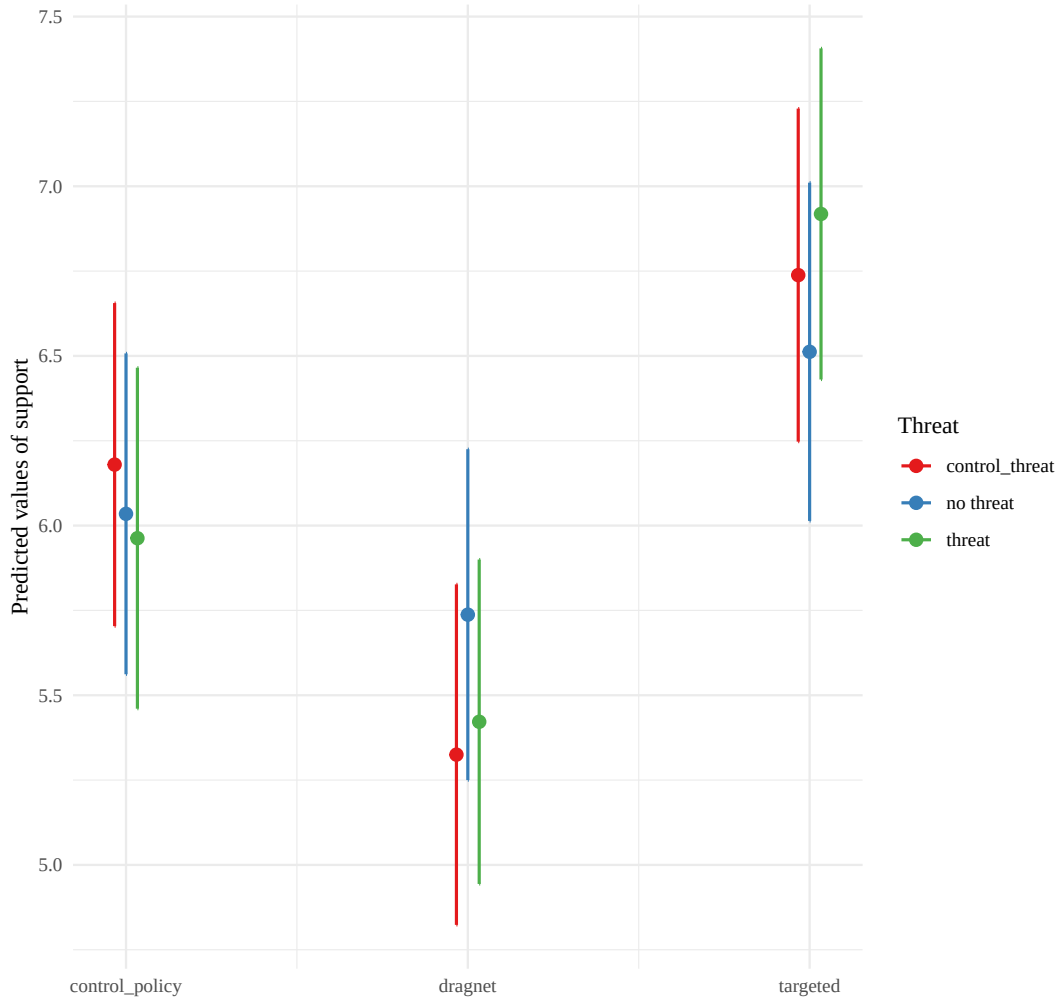


Figure A.6: Predicted values for the support of the surveillance policy based on becoming the target of a terrorist attack and the scope of the policy (dragnet/targeted).

Figure A.7: Predicted values for the support of the surveillance policy based on the policy proposing party and the inclination / disinclination with the AfD.

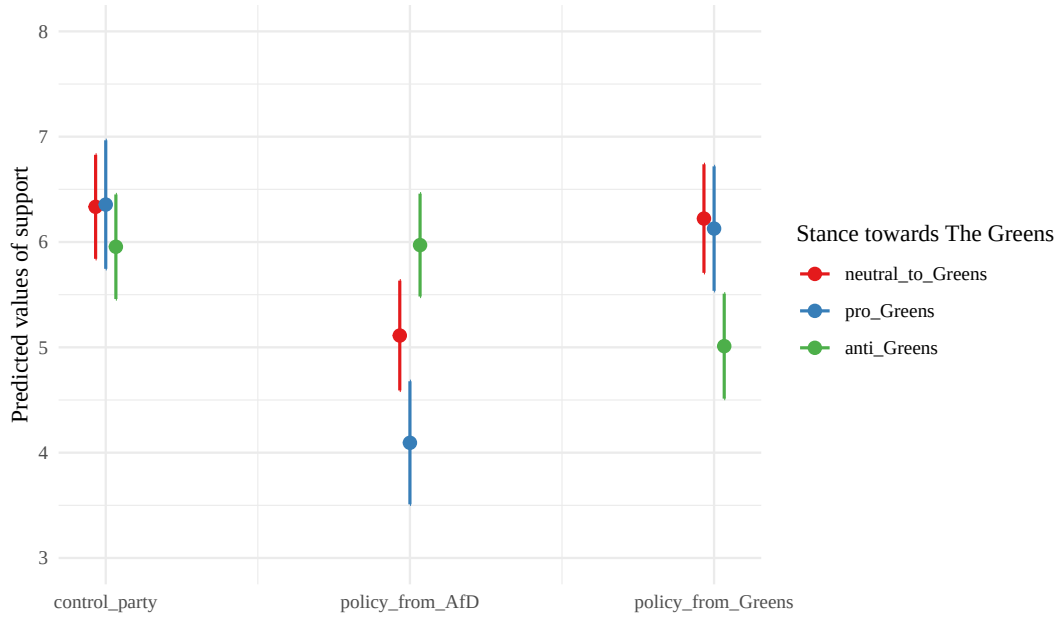


Figure A.8: Predicted values for the support of the surveillance policy based on the policy proposing party and the inclination / disinclination with The Greens.

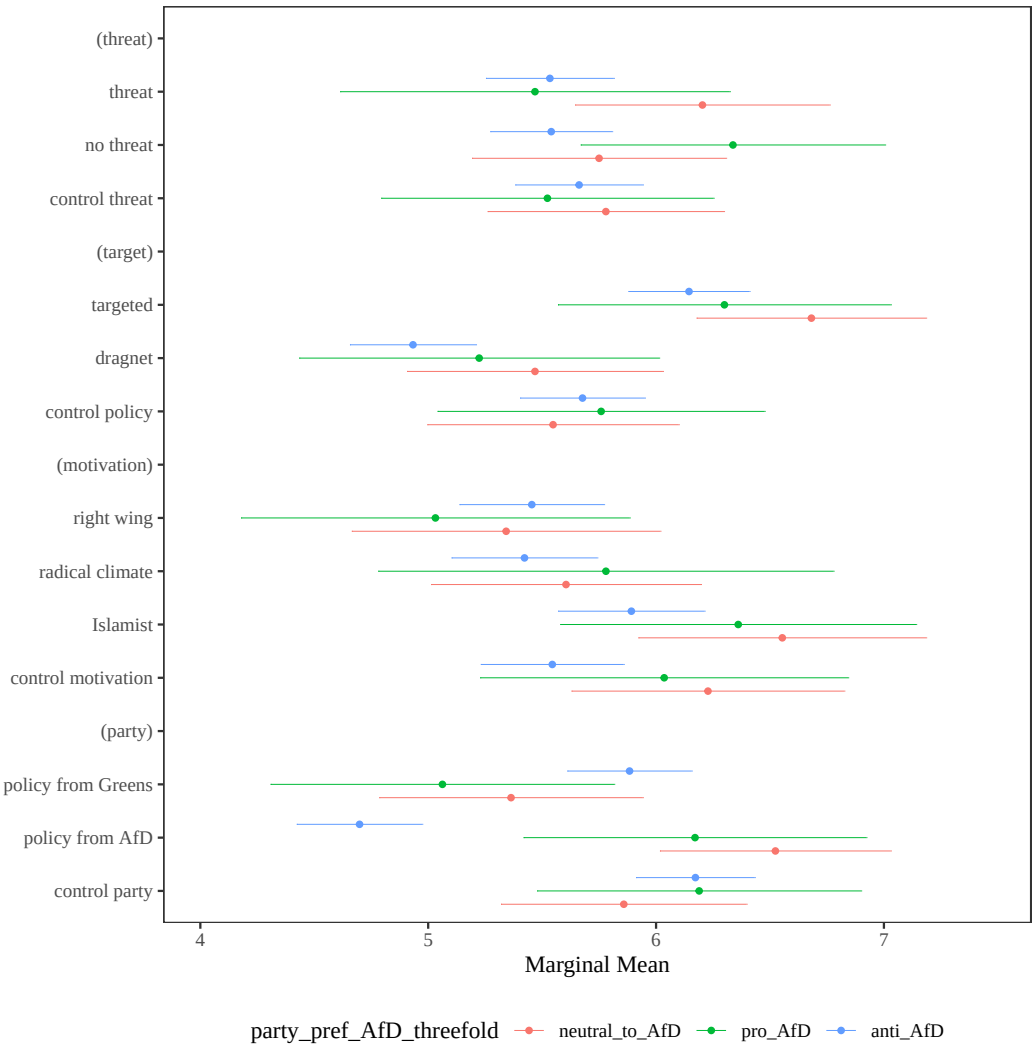


Figure A.9: Marginal means for the support of the surveillance policy divided by citizens inclination / disinclination for the AfD.

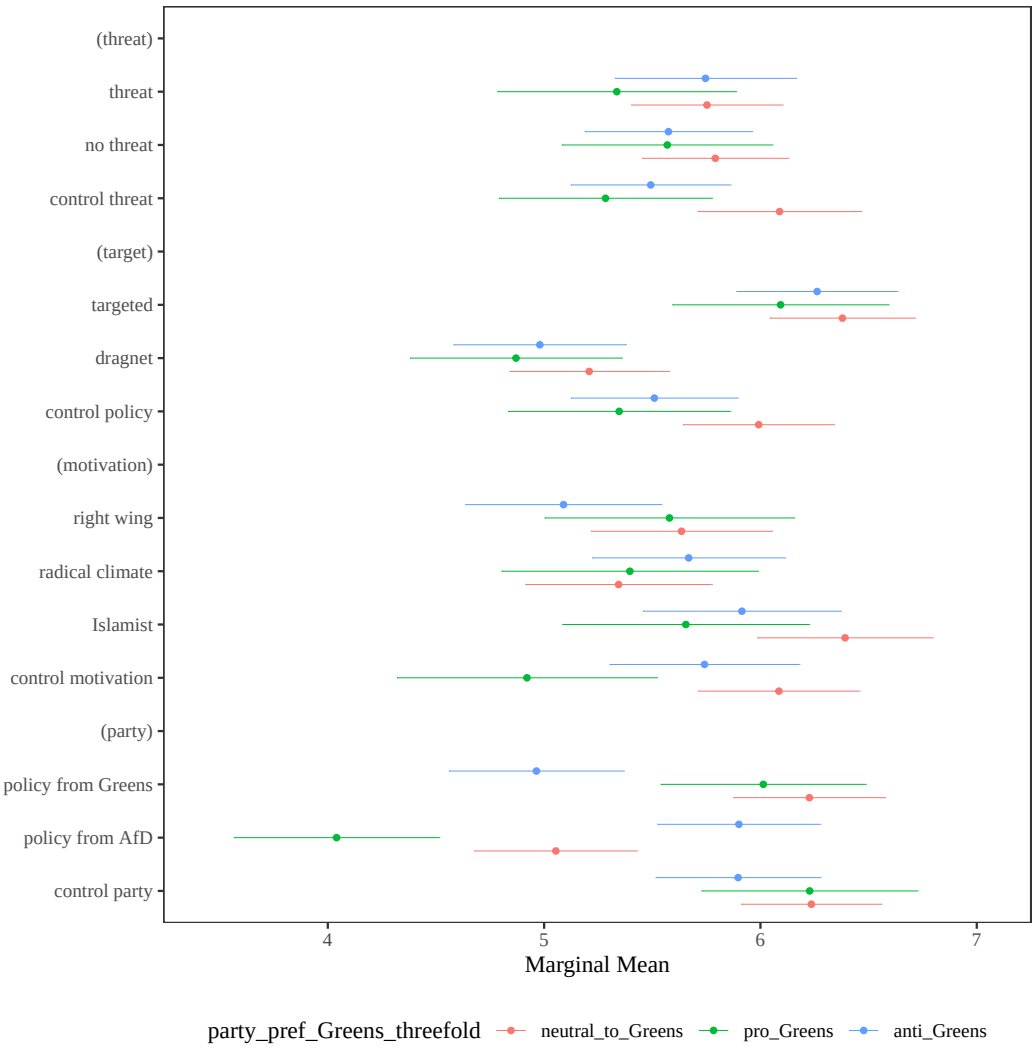


Figure A.10: Marginal means for the support of the surveillance policy divided by citizens inclination / disinclination for The Greens.

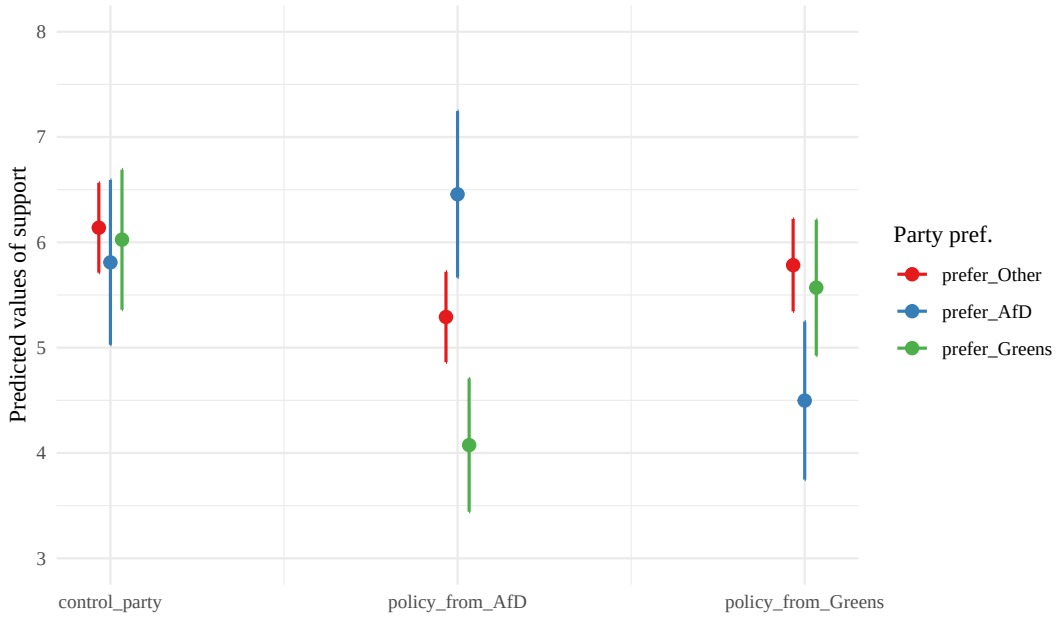


Figure A.11: Predicted values for the support of the surveillance policy based on the policy proposing party and citizens hypothetical party vote. Party preference is based on the hypothetical party vote. The item has nine response categories, the six major German parties, "other parties", "would not vote" and "not allowed to vote". I only keep The Greens (16.8 percent of respondents) and the AfD (10.2 percent of respondents) and code remaining answers as other.

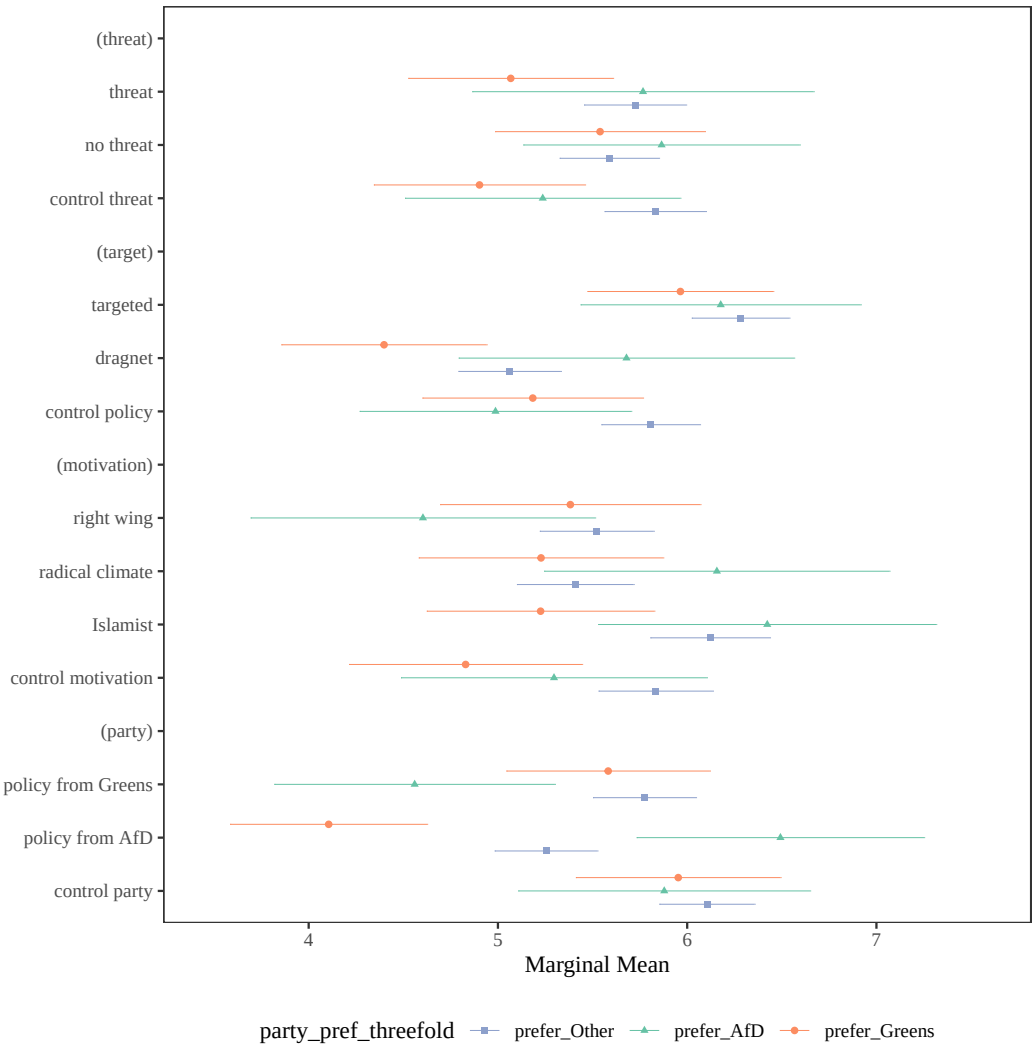


Figure A.12: Marginal means for the support of the surveillance policy divided by citizens hypothetical party vote.

A.5 Manipulation checks

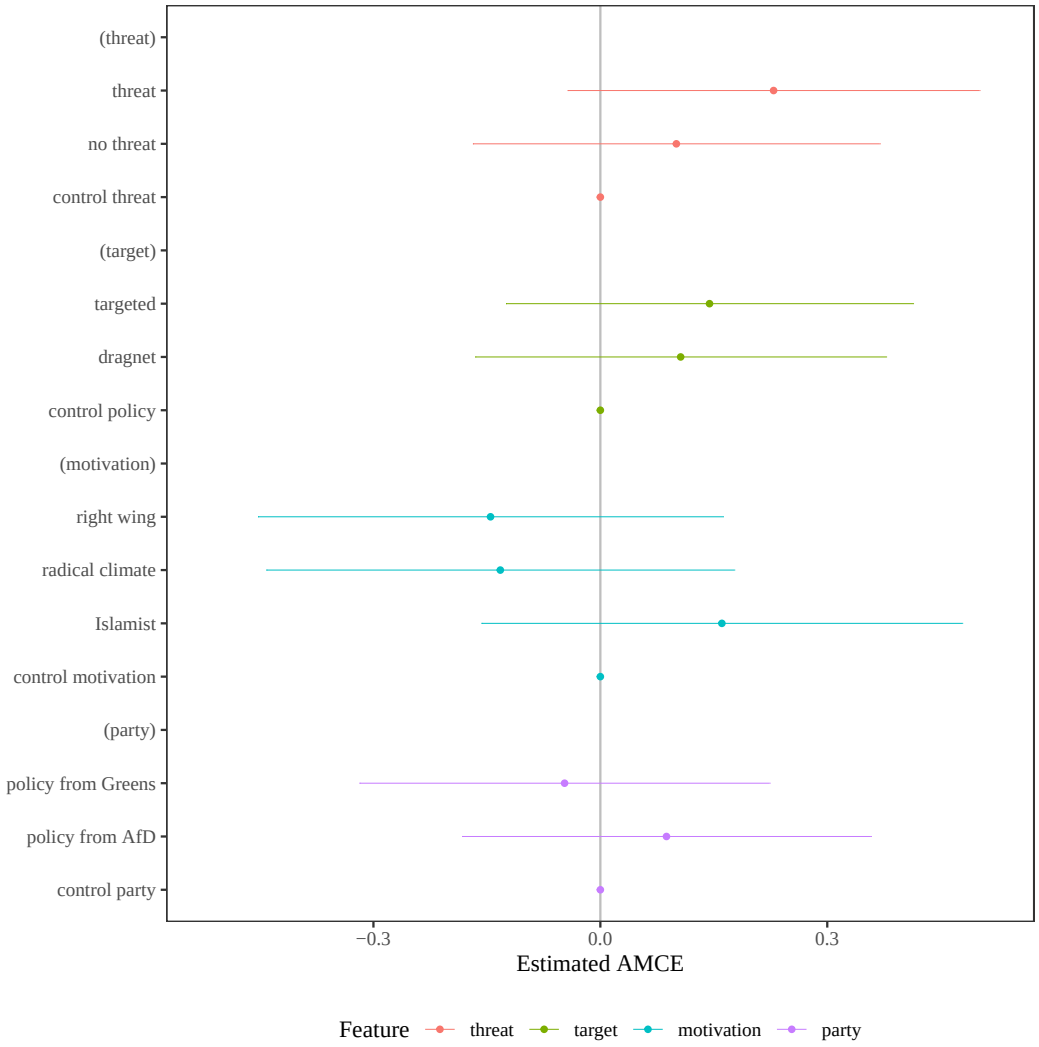


Figure A.13: Manipulation check for treatment dimension personal threat (personal threat or no personal threat). As dependent variable serves a measures whether respondents are concerned about them or their family or friends becoming target of a terrorist attack in the future (personal concern). Figure shows AMCEs with 95% confidence interval for all treatment dimensions.

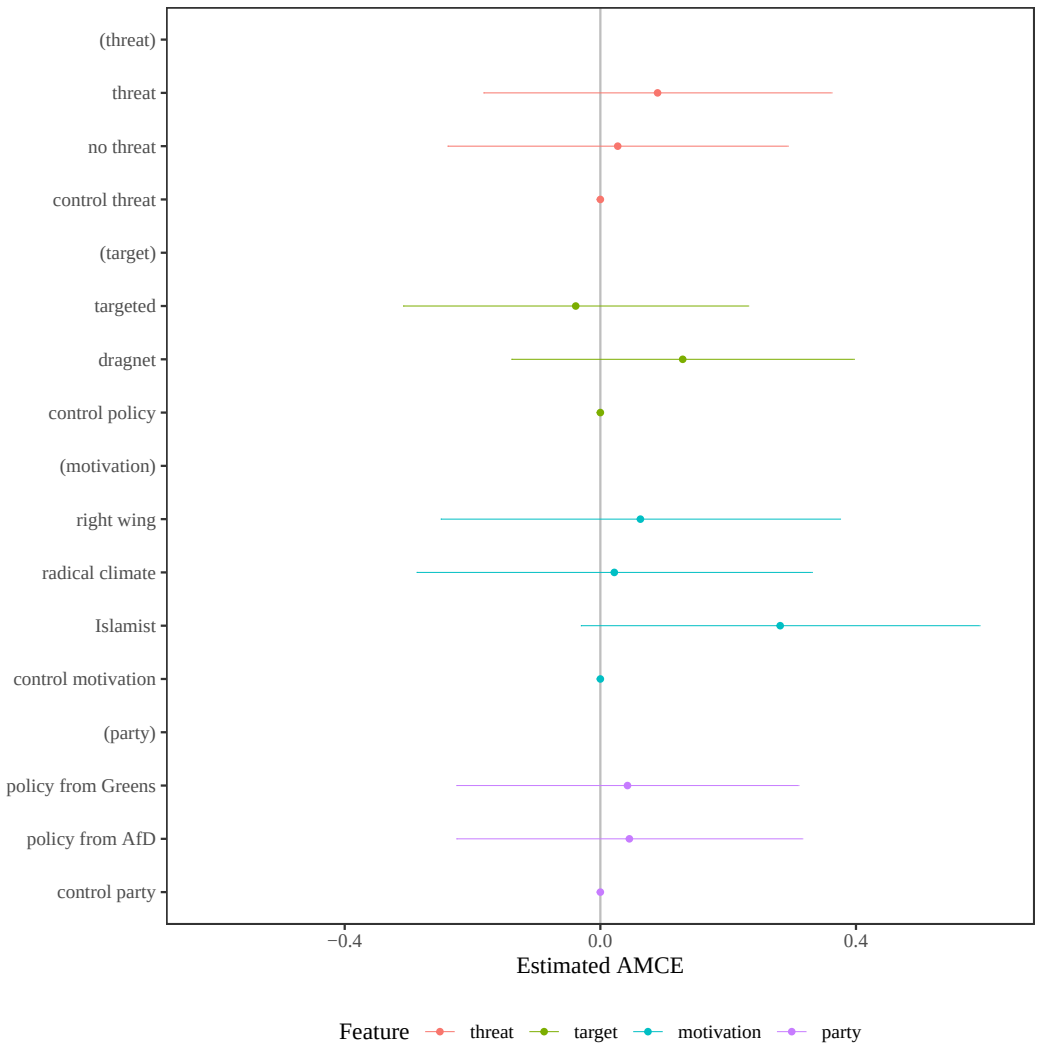


Figure A.14: Manipulation check for treatment dimension personal threat (personal threat or no personal threat). As dependent variable serves a measures whether respondents are concerned about terrorist attack on German soil in the Future (societal concern). Figure shows AMCEs with 95% confidence interval for all treatment dimensions.

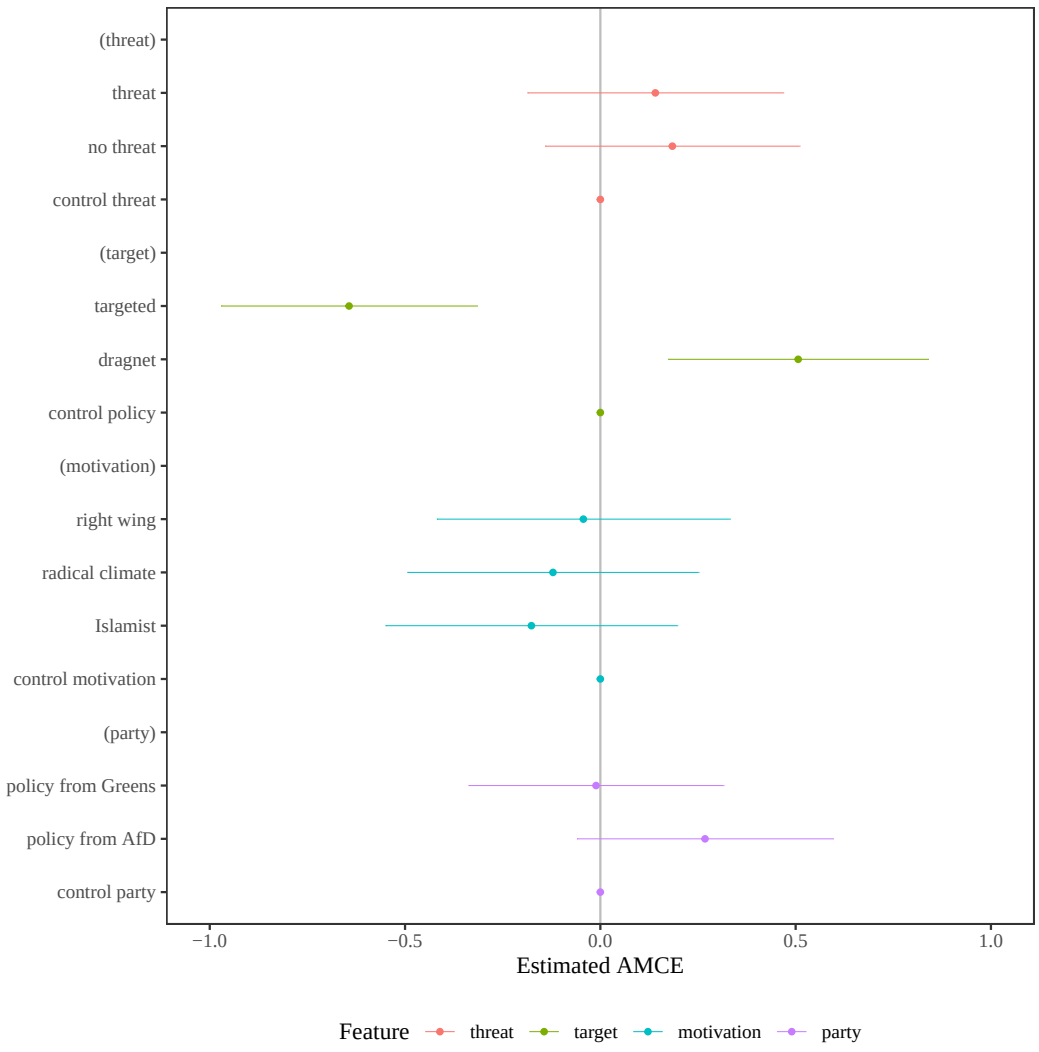


Figure A.15: Manipulation check for treatment dimension policy scope (dragnet or targeted). As dependent variable serves a measures whether respondents feel limited through the policy (Measure Objective). The Figure shows AMCEs with 95% confidence interval for all treatment dimensions.

Appendix B

Chapter 2

B.1 Additional information on methods

B.1.1 Setting: Germany

Studies have shown that threat communication in European countries is increasingly focusing on the topic of migration. A brief review of media coverage in Germany (see Figure B.1), the context of our study, confirms this pattern. However, the German case is exceptional in several regards, which we outline below. These particularities make Germany in many ways a conservative example for the relationship under study. The advantage of a conservative case is that any observed effects found are highly likely to generalize beyond this specific context.

Germany can be seen as a conservative case given its history. From 1950 to 1990, the country was separated, and the Ministry for State Security (Staatssicherheit, short: Stasi) had high power in East Germany. In this period, security was often the higher good on the freedom–security axis. Given the recency of these events, they remain salient in the collective memory of the German public. This makes discussions about policies on the freedom versus security continuum a sensitive topic that may provoke immediate resistance if perceived to be leaning too far toward security. Additionally, Germany is a long-time high-immigration country. Its political migration management, however, has only turned toward more liberal policies since the early 2000s. First, Germany adjusted to the norm of other European immigration countries (Koopmans et al. 2012) and then went beyond these norms in the so-called migration crisis in 2015-2016-2017. The extreme "refugees-welcome" behaviour was not well received by everyone and led to a new

polarization among the people.

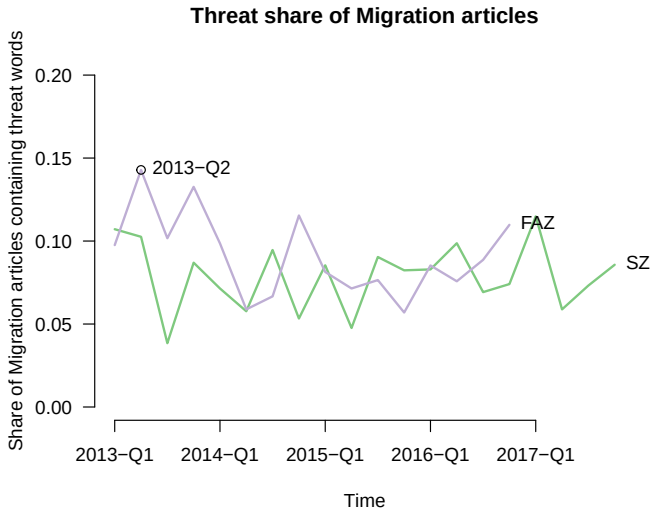


Figure B.1: Media coverage analysis for two major German newspapers, Frankfurter Allgemeine Zeitung (FAZ) and Süddeutsche Zeitung (SZ). The graph shows the share of articles about migration that contain threat-related words between 2013 and 2017.

B.1.2 Sample statistics

As shown in Table B.1, the overall sample is evenly distributed. 1,105 respondents indicated to be male, 1,095 to be female, and 7 respondents to be diverse. The age groups are clustered in the categories 18–29, 30–39, 40–49, 50–59, 60–64, with 20% of the overall sample in each group (plus 3 respondents who indicated to be older than 75 years). One third indicated having a low level of education, one third a medium level, and one third a high level. Most respondents had not heard of Smart Borders before the study (61% never, 19% seldom, 17% occasionally, 2% often, 1% very often). There are no major deviations from these distributions for the sub-samples in each experiment.

Table B.1: Descriptive sample statistics for demographic variables and the prior knowledge of Smart Borders. The first column shows the distributions for the whole sample. The second (fourth) column shows the sample used for the anxiety (anger) experiment. Due to the dichotomization of the variable, respondents who selected the midpoint on the scale measuring their support for Smart Borders were excluded. The third (fifth) column indicates the usable subsample for the PED, which excludes clear defiers from the sample: Respondents in the neutral encouragement group who report an anxiety level of three or higher (scale from 0 to 10) and those in the emotion encouragement of anxiety or anger who report a score of zero for the emotion of interest (scale from 0 to 10).

Sample	Whole		Anxiety Exp.		Anxiety PED		Anger Exp.		Anger PED	
Variable	N	Percent	N	Percent	N	Percent	N	Percent	N	Percent
Gender	2207		1043		765		991		736	
... male	1105	50%	539	52%	399	52%	509	51%	384	52%
... female	1095	50%	500	48%	362	47%	479	48%	350	48%
... divers	7	0%	4	0%	4	1%	3	0%	2	0%
Age	2207		1043		765		991		736	
... 18–29	416	19%	189	18%	138	18%	187	19%	129	18%
... 30–39	416	19%	192	18%	138	18%	159	16%	124	17%
... 40–49	416	19%	191	18%	142	19%	185	19%	134	18%
... 50–59	461	21%	226	22%	168	22%	212	21%	164	22%
... 60–74	495	22%	245	23%	179	23%	246	25%	185	25%
... 75+	3	0%	0	0%	0	0%	2	0%	0	0%
Education	2143		1009		743		963		719	
... low	748	35%	338	33%	249	34%	290	30%	222	31%
... medium	689	32%	315	31%	220	30%	319	33%	231	32%
... high	706	33%	356	35%	274	37%	354	37%	266	37%
Heard of Smart Borders	2204		1042		764		990		735	
... never	1344	61%	617	59%	457	60%	579	58%	430	59%
... seldom	410	19%	198	19%	140	18%	206	21%	155	21%
... occasionally	378	17%	186	18%	141	18%	163	16%	120	16%
... often	49	2%	26	2%	13	2%	29	3%	17	2%
... very often	23	1%	15	1%	13	2%	13	1%	13	2%

B.1.3 Power analysis

We concentrated the power analysis on the two sub-experiments without a random mediator manipulation (Sub-experiments I.I and II.I), since the calculation for the design without the encouragement requires fewer assumptions about manipulated variables, their effect sizes, and their uncertainty than for the full encouragement design. This approach is more conservative, as we would expect stronger effects in Sub-experiments I.II and II.II, in which respondents are encouraged to perceive anger or anxiety through a randomly assigned AEMT. As the power analysis in Figure B.2 shows, the planned sample size of N=333 would yield a high power (>.95) for the experiments with single design (Sub-experiments I.I and II.I). Since Sub-experiments I.II and II.II should be more informative than Sub-experiment I.I and II.I, the overall sample size of N=1000 we aimed at for each experiment (I and II) should yield sufficiently high power (>.95) to detect small effect sizes such as the effects in the second pre-study.

The calculations are based on estimations from the second pre-study, in which we implemented the design without manipulation of the mediator in a convenience sample (see details below). Based on the effect size of the treatment on reported levels of anger (see Table B.3) and the effect of anger on the support for Smart Borders (see Table B.4) we make an informed guess about actual effect sizes of the mediation effect. The respective curve is indicated with 100%, which means that it shows the link between power and sample size based on a 100% equal effect size and variance. Respectively, 90%, 80%, and 70% represent the curve behaviour for smaller effect sizes or higher noise, and 110% and 120% for larger effect sizes or smaller noise. If the estimates in the actual study were similar to those in pre-study 2, we would achieve a power of.95 with a sample of N=290.

Although our research design aims to study the mediating effect of both anger and anxiety, we here present only the results from the power analysis for anger for two key reasons. First, the relationship between threat, anxiety, and security preferences is well established in the literature. Second, in our second pre-study, the mediating effect of anxiety was smaller than expected and is likely to be different in the main study (see next paragraph). If the mediating effect of anxiety was as large as in the second pre-study, we would not achieve sufficiently high power to detect an effect. However, we are highly

confident that the impact of the treatment on anxiety will be stronger, i.e., comparable in size to the effect we observe on anger. Hence we rely on the effect size of anger for the power calculation. Being comparable might mean that the effect size or noise varies slightly. This is shown in the variations as larger and smaller than 100% in Figure B.2, indicating that even with a conservative expectation of only 70%, our sample size of the sub-group, i.e., N=500, still achieves a statistical power of 0.93.

The discrepancy between our expectations for the main study with PED and the results of the second pre-study can be attributed to shortcomings arising from the demographics and the relatively small size of our convenience sample. In the sample of the second pre-study, only 38.24% of respondents indicated being female (61.03% male and 0.74% non-binary). According to the literature, a skewed distribution toward male respondents may cause a distorted picture of the mediating effects of emotions, as female participants tend to express higher levels of emotions (Boussalis et al. 2021) and different types of emotions. In line with our pre-study results, studies have shown that women feel more anxiety than men (Kring & Gordon 1998) while men perceive anger more often (Schneider & Bos 2019). In the pre-study, anger was, on average, more present among respondents than anxiety, even in the anxiety treatment group. Although we expect that respondents do not perceive only one emotion throughout the experiment, but multiple emotions to different degrees simultaneously, we would expect the experimentally intended emotion (anger or anxiety) to be the most dominant. The dominance of the emotion anger in the anxiety treatment group blurs our estimation and hence causes smaller average mediation effects in Experiment I in the second pre-study. However, the full parallel encouragement design allows us to disentangle the effect of the two emotions and therefore their strong single effects, which again is the aim and major contribution of our study.

B.1.4 Case: Smart Borders

To test our arguments, we focus on the level of support for Smart Borders, a European immigration policy. Several aspects make this policy particularly well-suited to analyze our hypotheses. First, immigration is a highly realistic case and a topic that is discussed regularly in European media and parliaments. At the same time, research has shown that threat

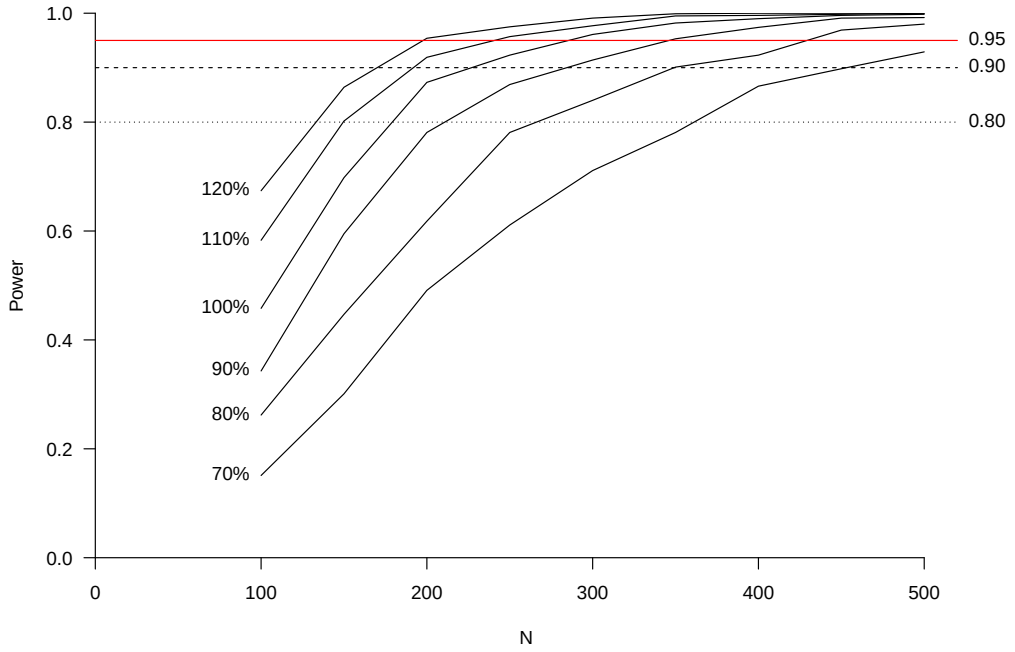


Figure B.2: Power analysis for the average causal mediation effect based on Schoemann et al. (2017). The curve labeled with 100% is based on the effect sizes found in pre-study 2 for the mediating effect of anger. The other curves are calculated with different shares of that effect size, beginning from 70%, a conservative value.

communication is increasingly focusing on the topic of migration in European countries (Bourbeau 2011). Second, immigration is a topic that evokes a wide range of opinions within society, making it highly likely that an informational treatment about a migration-related threat can credibly elicit strong emotions among citizens.

One complication of our research design might be that opinions on widely known immigration policies are already deeply embedded in the minds of citizens. As shown in the study by Valentino et al. (2018), this could make them less susceptible to manipulation in the context of a survey experiment. We address this complication by focusing on the relatively unknown policy debate around the introduction of Smart Borders within the broader discussion about the digitalization of migration management. The conflict between security and freedom is inherent in this policy. With the introduction of machine learning and AI, its implementation promises increased security. However, this security comes at the cost of citizens' freedom, as one requirement for the policy is a EU-wide

database of citizens, which has raised concerns about citizens' privacy rights. The European Commission proposed the so-called Smart Borders policy in 2011. However, due to the complexity and the ethical dilemmas involved, implementation has stalled, and the proposal has not yet attracted much interest from the media[1] or the public. Therefore, we do not expect citizens to hold strong opinions on this policy.

Hence, our case selection leverages the combined facts that immigration and border management are highly salient and emotionally discussed issues, while opinions on the introduction of the policy of Smart Borders should be relatively weak.

B.1.5 Outcome measures

The outcome measurement comprises one variable measurement and one reasoning measure. The former is the primary measure of this study. The outcome is measured based on respondents answers to "What are your preferences, should Germany advocate for or against a Smart Borders policy in the EU?" and their ranking o arguments on an 11-point answering scale (see visualisation Figure B.4).
The second measurement has the following pre-text: "There are many arguments for or against a Smart Border policy. Please rank the following arguments in order of importance to you personally." The arguments are shown in random order and can either be categorized as arguments supporting individual or supporting security (see brackets below). It is a non-comprehensive selection of arguments based on the qualitative study by Lehtonen and Aalto (2017), reflecting the Smart Border debate.

- Data retention constitutes an excessive intrusion into individual privacy [Freedom]
- The expansion of databases increases the risk of unwarranted government surveillance [Freedom]
- The EU should oppose the dehumanization through data and algorithms and uphold the principle of personal freedom. [Freedom]

[1] Only in May 2024, four months after the implementation of this study, the topic became shortly popular in Germany due to the TV show "ZDF Magazin Royale" and their episode "KI an EU-Außengrenzen: Die smarte Dystopie" (https://www.youtube.com/watch?v=SY_xV-Raq3A, accessed 27.11.2024).

- Data retention is justified by the need to mitigate the risks at the borders. [Security]
- The expansion of databases equips state authorities with an additional tool to combat crime. [Security]
- The EU should support border security through technological solutions. [Security]

The two main assumptions regarding the dependent variable, i.e., attitudes toward the EU's policy of Smart Borders, are that (i) it is a relatively unknown issue to most respondents, and (ii) respondents' attitudes toward it mirror their broader views on the trade-off between security and freedom. These assumptions are both supported by the results of the first pre-study. The majority of respondents had heard little or nothing about the policy (71.64% never, 10.69% rarely, 11.13% sometimes; see Figure B.6d). A similar distribution was found in the main study (61.0% never, 18.6% rarely, 17.2% sometimes; see Table B.1). Additionally, we compared the dependent variable of policy preferences with a measure capturing respondents' positions on the issue of freedom versus security. As shown in Figure B.6c, respondents' attitudes toward the Smart Borders policy reflect the underlying theoretical link between freedom and security.

B.1.6 Treatment

Treatment design. The treatment design for the PED experiment is exactly the same as the one tested in pre-study 2. It consists of two components: First, every participant receives a short introduction to the topic in the form of a fictive excerpt of a fact sheet (*Eckpunktepapier*), as used in the German *Bundestag* to provide a general introduction or overview to a topic under discussion. This fact sheet provides information about a topic debated in the German parliament, the policy Smart Borders, including one argument for each side of the debate. The text is accompanied by a picture of the German parliament, emphasizing the contextual setting. Second, respondents in the control group are directed to the follow-up questions, while respondents in the treatment group receive an excerpt of a transcript of a fictitious speech about immigration by a politician. The two-paragraph speech frames immigration as threatening. However, the text uses different emotion-inducing elements depending on the experimental group: the first experimental group is exposed to

anxiety-inducing content, while the second experimental group is presented with elements designed to elicit anger.

Texts of the treatment. In the following, we provide the English translations of the fact sheet, the anxiety treatment text, and the anger treatment text.

Fact sheet/*Eckpunktepapier*. The following is a summary of a fact sheet from the *Bundestag*. A fact sheet provides a general introduction to or overview of a topic under discussion in the *Bundestag*. [new slide] Smart Borders refers to the *automated identification* of individuals crossing the border using a video surveillance system. A key requirement for this system is a *personal data registry containing identity information of all EU citizens* and people entering the EU, accessible to authorities in all EU member states. While supporters argue that the system will enhance *security*, critics highlight concerns about *infringements on individual freedom* and the potential use of racial profiling through AI-based screening of migrants. [Picture Figure B.3]

© Deutscher Bundestag / Thomas Trutschel / photothek

Figure B.3: Picture of the German parliament. The picture is presented below the text of the fact sheet/*Eckpunktepapier*

.

Anxiety treatment text. The following is an excerpt from a speech delivered in the *Bundestag*. Please read the excerpt carefully. [New slide] Bundestag speech by a Member of Parliament (excerpt): We know that irregular migration—that is, migration not related

to seeking asylum—has long remained off the political agenda because the annual numbers were manageable. However, the sharp increase in expected arrivals *this year* makes us talk about a threat. It is becoming *a new threat* to our administrative order and poses a long-term burden for law enforcement and executive agencies tasked with safeguarding public security. It may also strain Germany's welfare and humanitarian commitments, particularly regarding recently arrived asylum seekers. It is possible that the authorities no longer have the *chaos under control.* [New slide] The reception capacities of the EU countries are *likely* to be completely exhausted over the course of the year, pushing border control agencies, initial reception centers, and immigration offices into a state of *persistent and uncontrollable chaos*. This would result in a new dimension of *continuous insecurity*. For newly arrived refugees, this insecurity could lead to noticeable reductions in welfare support. But even for society as a whole, such a crisis would necessitate adjustments to everyday life. Citizens would need to live with increased caution and vigilance every day and be prepared for all contingencies. [Picture (a) Figure B.5]

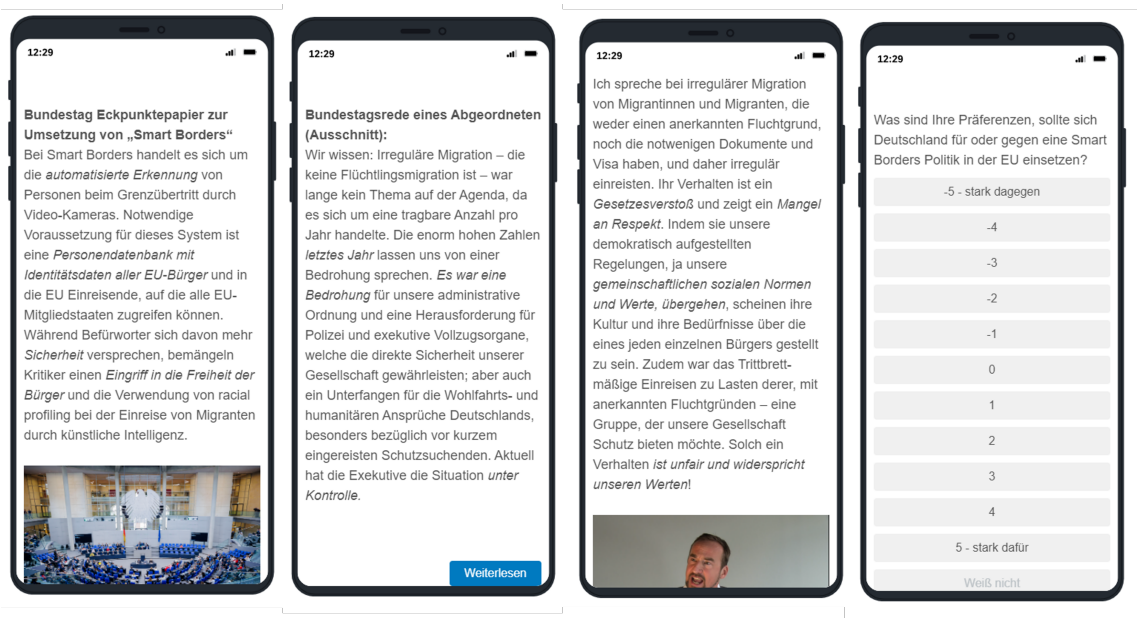
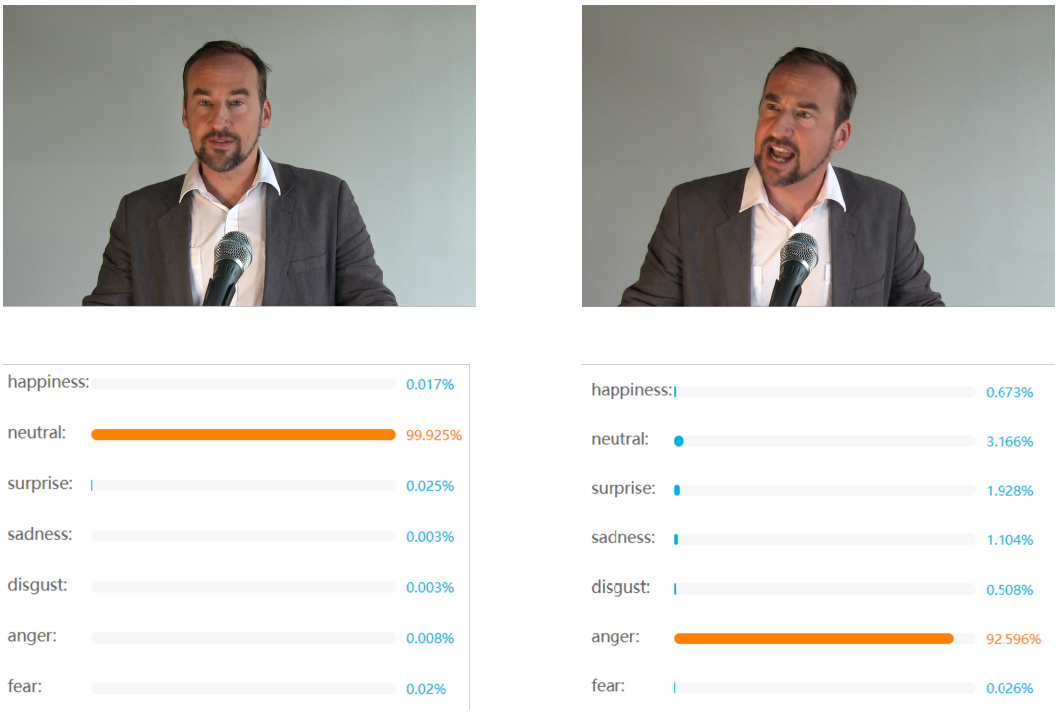


Figure B.4: Phone preview of the treatment design and the main dependent variable measure. We made sure that the complete text is on one page using a standard phone.

Anger treatment text. The following is an excerpt from a speech delivered in the

German Bundestag. Please read the excerpt carefully. [New slide] Bundestag speech by a Member of Parliament (excerpt): We know: Irregular migration—that is, migration not related to seeking asylum—has long remained off the political agenda because the annual numbers were manageable. However, the enormously high numbers *last year* make us talk about a threat. *They posed a threat* to our administrative order and a challenge for law enforcement and executive agencies tasked with safeguarding public security. It also strained Germany's welfare and humanitarian commitments, especially regarding recently arrived asylum seekers. Currently, the authorities have the situation *under control.* [New slide] By irregular migration, I am referring to the movement of individuals who lack both a recognized reason for asylum and the required documentation or visas, and who have therefore entered the country without authorization. Their behavior is a *breach of law* and shows a *lack of respect*. By circumventing our democratically established regulations, indeed our *shared social norms and values,* it appears as though their culture and personal needs are being placed above those of every individual citizen. Moreover, this form of opportunistic entry comes at the expense of those with legitimate grounds for asylum—a group our society genuinely seeks to protect. Such behavior *is unfair and contradicts our core values*! [Picture (b) Figure B.5]

Treatment-enforcing images. The two pictures of a politician (Figure B.5)are screenshots from emotion-inducing political speeches performed by an actor in a study by Küntzler (2021). By having an actor perform the political speech, we safeguard against the potential recognizability of a politician by the participant audience. In the anger-eliciting treatment manipulation, the politician looks angry; in the anxiety-eliciting treatment, the politician looks neutral. According to the literature on emotion transmission via facial expressions, the facial expression that corresponds to the intended emotion is typically used in human interactions to elicit that emotion. In the anxiety experiment, we decided to use a neutral facial expression to stay closer to real-world settings. Politicians express anger in speech, but do not show anxiety in the official setting of a political speech (Stewart et al. 2011). The emotions per picture are validated using the Face ++ application, which confirmed that anger and neutrality to be the dominant emotions, respectively.



(a) Image of the politician used in the anxiety treatment. Source: Küntzler (2021); Face ++ Facial expression emotion validation.

(b) Image of the politician used in the anxiety treatment. Source: Küntzler (2021); Face ++ Facial expression emotion validation.

Figure B.5: Pictures per treatment group and A.I. detection of emotions within pictures.

We test for treatment taking using two components: indications of "reading the text", i.e., manipulation checks that support the assumptions that those assigned to treatment take the actual treatment, and indications of "processing the text", i.e., manipulation checks that support the assumptions that all participants receive the same treatment and in a similar dosage.

B.1.7 Mediator and AEMT

First, we examine whether the assigned encouragement and the emotion reported in the manipulation check align on the individual level. As demonstrated in Table B.2, the AEMT was effective in eliciting the desired emotional response. In each encouragement scenario, 83 to 87 percent report that the respective emotion is present. However, these

numbers decrease when looking for the strongest emotion.

Second, we analyze the written texts with regard to individuals' emotions. A research assistant coded the written answers without knowing the encouragement condition. The coding scheme encompassed the six (anxiety, joy, sadness, anger, disgust, and a neutral state) on a scale from zero to ten. The classification of the essays by a research assistant consistently aligns with both codings, with the emotion being present or strongest. However, the neutral coding performed less effectively than for the actual respondents.

The correlation between the self-reported emotion and the classification of the student assistant is positive and significant for all different recodings of the emotion measure (continuous, present, strongest). For anger, the correlation is between 0.12 and 0.23. For anxiety, the correlation is between 0.08 and 0.13, which can be considered rather small.

	Anger	Anxiety	Neutral
Share emotion present	0.87	0.83	0.87
Share emotion strongest	0.47	0.29	0.35
Share emotion classified as present	0.91	0.83	0.32
Share emotion classified as strongest	0.81	0.73	0.21

Table B.2: Descriptive check of the AEMT. Columns represent the different AEMT conditions: encouragement of anger, anxiety, or neutrality. The first two rows indicate whether the corresponding emotion was self-reported as present or as the strongest emotion. The last two rows show whether the classified emotions match the intended emotional induction.

B.2 Pre-study 1

The finally used PED research design is very similar to the inital design employed in pre-study 1, except for two key differences (and some minor measurement and layout adjustments based on what was learned). The first is that in pre-study 1, we do not test the full PED, but only the version without experimental mediator manipulation (ergo, Figure 2.3: Sub-experiments I.I and II.I) per emotion (Figure 2.3: Experiment I and Experiment II).

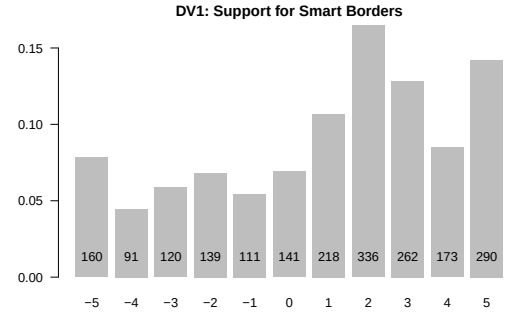
The second key difference to the design used here is the treatment design (threat communication with emotion-inducing elements). As described below, our original treatment consisted of a newspaper article and varied only with regard to "uncertainty" (controlled setting or uncertain setting) which is only one of multiple emotion-inducing elements (see Table 2.1).

Sample. The sample is similar to the main study. Data were collected between 8 and 24 August 2022, with a final sample of 2,274 respondents. The survey was administered online in Germany by the survey firm Respondi. The respondent pool was designed to be representative of the German population in terms of gender, age, and education. An attention check (1+1=3) was passed by 89.95% of respondents.

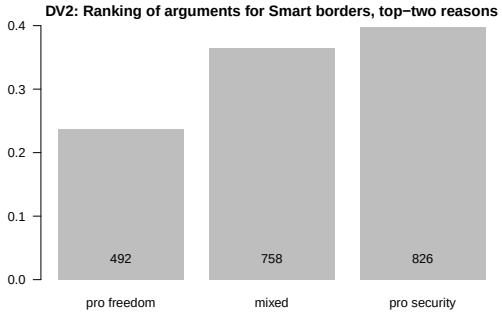
Outcome. As presented in Figure B.6, both the first (B.6a) and the second (B.6b) measures of the dependent variable are widely distributed across all response categories. The distribution is rather balanced, with slight tendencies in favor of Smart Borders and security. These distributions reflect the diverse discussion about the migration policy of Smart Borders in political circles. From a research perspective, the wide distribution gives us analytical power. Comparing these two measurements of policy preferences, the support for the policy and the ranking of arguments, reveals a noteworthy correlation (see Figure B.6c). This confirms that support for Smart Borders is linked to support for security, while opposition to Smart Borders is linked to support for freedom.

Figure B.6d presents the distribution of the respondents' having heard about the policy. A large majority of 70% indicate that they have never heard of Smart Borders, and an additional 20% have heard about it rarely or sometimes. This 90% indication of "never" to "sometimes" shows that Smart Borders policy is a topic largely unknown to the public and therefore our treatment provides new information to respondents. This supports our assumption that we are not measuring fixed attitudes, but rather attitudes that remain responsive to the treatment.

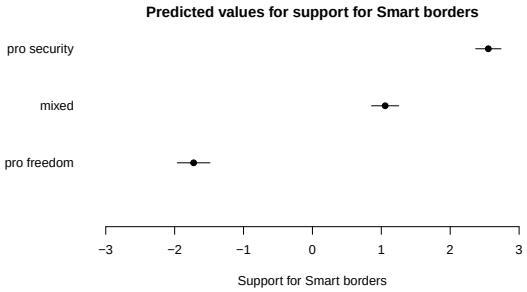
Treatment. Pre-study 1 consists of two experimental manipulations: the treatment and a moderator (variation in type of threat: security, economic, cultural). Both are manipulated using a fictitious newspaper article. The wording of the article text is based on real newspaper articles from central German newspapers. The article should reflect



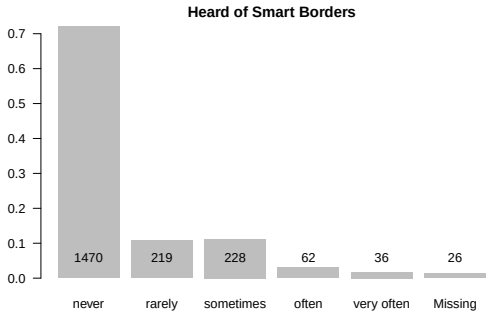
(a) Distribution DV1.



(b) Distribution DV2.



(c) Prediction of DV1 through DV2.

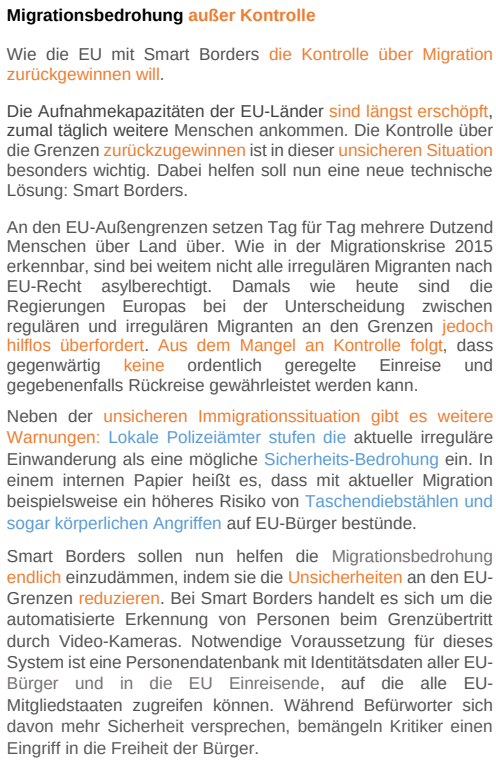


(d) Distribution prior policy topic knowledge.

Figure B.6: Descriptive statistics of the dependent variable measures; DV1 = support for Smart Borders policy; DV2 = ranking of arguments for/against Smart Borders, recoded as two pro freedom/against Smart Borders arguments first, mixed arguments in the two top ranks, and two pro security/against Smart Borders arguments first; prior policy knowledge = whether the respondent has heard about the Smart Borders policy (never, rarely, sometimes, often, very often, missing).

a widely read newspaper article that differs only in the two experimental manipulations. Additional information is kept constant, such as the reference object. The article contains a headline, a sub-headline, three paragraphs with several iterations of the treatments, and a paragraph introducing the policy of Smart Borders.

Respondents are randomly divided into two treatment groups and a control group. In one treatment arm, the situation is described as very uncertain and out of control, while in the other treatment arm, the situation is described as under control. In the control group, the situation is described as "neutral" matter-of-factly without indication towards a degree of control. The treatment of threat communication covers the entire newspaper article. The



Migrationsbedrohung außer Kontrolle

Wie die EU mit Smart Borders die Kontrolle über Migration zurückgewinnen will.

Die Aufnahmekapazitäten der EU-Länder sind längst erschöpft, zumal täglich weitere Menschen ankommen. Die Kontrolle über die Grenzen zurückzugewinnen ist in dieser unsicheren Situation besonders wichtig. Dabei helfen soll nun eine neue technische Lösung: Smart Borders.

An den EU-Außengrenzen setzen Tag für Tag mehrere Dutzend Menschen über Land über. Wie in der Migrationskrise 2015 erkennbar, sind bei weitem nicht alle irregulären Migranten nach EU-Recht asylberechtigt. Damals wie heute sind die Regierungen Europas bei der Unterscheidung zwischen regulären und irregulären Migranten an den Grenzen jedoch hilflos überfordert. Aus dem Mangel an Kontrolle folgt, dass gegenwärtig keine ordentlich geregelte Einreise und gegebenenfalls Rückreise gewährleistet werden kann.

Neben der unsicheren Immigrationssituation gibt es weitere Warnungen: Lokale Polizeiämter stufen die aktuelle irreguläre Einwanderung als eine mögliche Sicherheits-Bedrohung ein. In einem internen Papier heißt es, dass mit aktueller Migration beispielsweise ein höheres Risiko von Taschendiebstählen und sogar körperlichen Angriffen auf EU-Bürger bestünde.

Smart Borders sollen nun helfen die Migrationsbedrohung endlich einzudämmen, indem sie die Unsicherheiten an den EU-Grenzen reduzieren. Bei Smart Borders handelt es sich um die automatisierte Erkennung von Personen beim Grenzübertritt durch Video-Kameras. Notwendige Voraussetzung für dieses System ist eine Personendatenbank mit Identitätsdaten aller EU-Bürger und in die EU Einreisende, auf die alle EU-Mitgliedstaaten zugreifen können. Während Befürworter sich davon mehr Sicherheit versprechen, bemängeln Kritiker einen Eingriff in die Freiheit der Bürger.

Figure B.7: Exemplary newspaper text; although in German language the color codes (not color-coded in the implemented treatment) show the manipulations within the text: Orange = treatment (in the shown example: uncertainty to provoke anxiety), Blue = Moderator (in the shown example: type of threat– security).

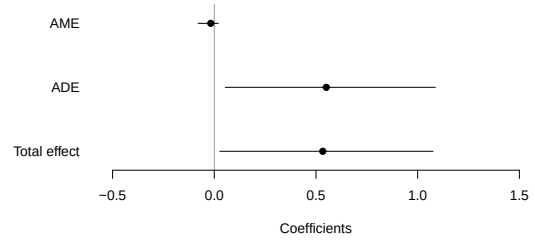
orange colour code in Figure B.7 represents the treatment manipulation and illustrates that the treatment is manipulated in the headline, the sub-headline and several times in each of the four paragraphs of the newspaper article. The blue colour code in Figure B.7 represents the moderator manipulation, i.e., different types of threat. Although interesting, due to a lack of statistical power, we decided to drop the variation of different types of threat (security threat, economic threat, cultural threat) for the main study.

Results. A descriptive comparison of the pre-study results shows rather low correlation values: correlation of anger and controlled setting condition = 0.03, correlation of anxiety and uncertain setting condition = -0.015, with both confidence intervals crossing

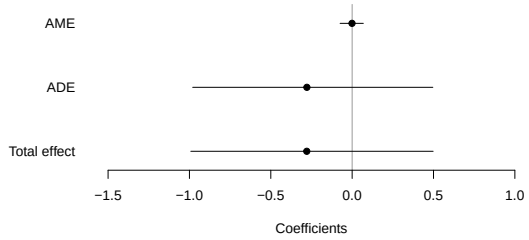
the zero axis. Although the values tend toward the expected direction, they are rather small. The results of the model-based causal mediation analysis(Imai et al. 2013; Tingley et al. 2014) are presented in Figure B.8. In the uncertainty setting condition respondents are more likely to support Smart Borders, i.e., for policy measures prioritizing security; in contrast, the controlled condition is associated, although insignificantly, with lower support for Smart Borders and hence policy measures prioritizing individual freedom. However, the total effect of the mediation is similar to the direct effect. This indicates that the ACME estimate that is observable at the top of both graphs is close-to-zero. In other words, we do not observe the expected mediation effect of the emotions under study. By examining the assumed mediation step by step, as known from traditional non-causal mediation analysis, it becomes apparent that the missing mediation effect is most likely based on the insignificant and small influence of the treatment on the strength of the respective emotions. This regression result is in line with the descriptive correlations described above.

Discussion and learning from Pre-study 1. The results of Pre-Study 1 raised the question whether we actually identified a null effect or whether the treatment design had simply been ineffective. This primarily concerns the sample size of our study. According to our pre-registered power calculations based on expectations for the treatment effect and standard deviation of similar studies, we would have needed a sample size of minimum N=503 to achieve a power of 0.80 with an alpha error probability of 0.05. Our sample size in the pre-study was 2,274, which makes us believe that, we could have identified even smaller effects than expected.

Presuming that the results do not reflect a true null effect, we could attribute them to a weak or inadequate treatment design. Since the treatment was presented in the form of a newspaper article, one problem could be that the participants may not have actually read the text. Instead, they may have just waited until the required minimum time on the page (45 seconds) had passed before moving on to the next question. However, our review of the distribution of reading time (see Appendix Figure B.9) speaks against this assumption. Another argument relates to the text in general. For example, one could argue that the manipulation embedded in the article may be ineffective because too subtle. However, if we



(a) H1a: Effect of threat of uncertainty on support for Smart Borders mediated by anxiety. ACME -0.017, 95%-CI $[-0.08, 0.02]$, p-value: 0.436; ADE 0.551, 95%-CI $[0.05, 1.09]$, p-value: 0.028; Total effect 0.534, 95% CI $[0.03, 1.08]$, p-value: 0.38; N=536



(b) H1b: Effect of a threat under control on support for Smart Borders mediated by anger. ACME -0.001, 95%-CI $[-0.07, 0.07]$, p-value: 0.99; ADE -0.278, 95%-CI $[-0.98, 0.50]$, p-value: 0.45; Total effect -0.279, 95% CI $[-0.99, 0.50]$, p-value: 0.45; N=354

Figure B.8: Pre-study 1. Model-based causal mediation analysis for the dependent variable support for Smart Borders; ACME = average causal mediation effect, ADE = average direct effect, total effect = effect of the whole mediation model of (a) uncertain setting condition or (b) controlled setting condition on support for Smart Borders; the hypotheses (H1a and H1b) were pre-registered and correspond to Hypothesis 1 and Hypothesis 2 of the main study.

look at another experimental manipulation in the newspaper article (in this pre-study, we additionally manipulated three different types of threat: security threat, cultural threat, and economic threat), two quite relevant results emerge. Firstly, the manipulation check of the recalled threat type demonstrates a high rate of correct answers. Secondly, the three threat types have different significant effects on the mediator emotion measure and the dependent variable. It is evident that the experimental component, which was manipulated in a single paragraph of the newspaper article, had a significant impact. However, this impact was not sufficiently robust to elicit a strong emotional response in the setting, when compared to the uncertainty versus control setting condition. Based on these considerations, the key takeaway from this pre-study was to keep the emotion measurement, the dependent variable measurements, and the topic of the treatment the same while redesigning the treatment to more effectively elicit emotions.

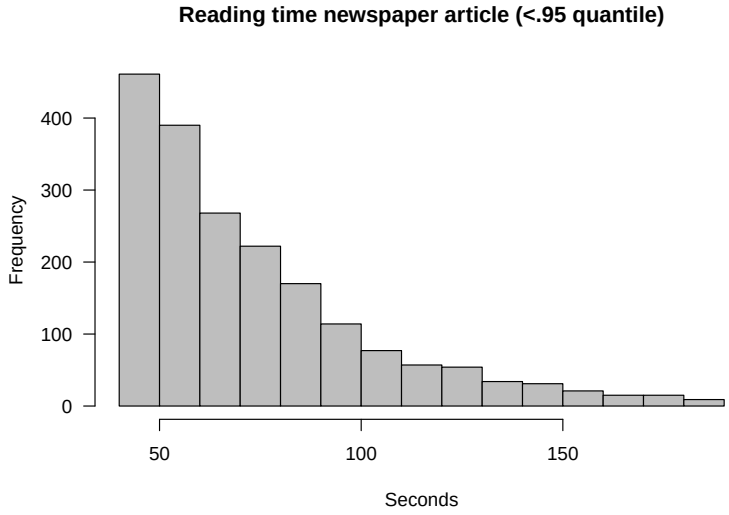


Figure B.9: Pre-study 1: Time spent reading the fictional newspaper article. Respondents had to remain on the page for at least 45 seconds.

B.3 Pre-study 2

Based on the results of Pre-study 1, we re-designed our treatment, particularly concerning its effectiveness in eliciting emotions. We changed the treatment text from a newspaper article to a political speech in parliament to keep the treatment natural and realistic. In a political speech, emotions are also normatively more accepted than in a newspaper article. being accepted as the social norm. Additionally, we revised the literature on emotion-triggering mechanisms linked to threat and included all central emotion-inducing elements in the new treatment (see Table 2.1). We also manipulated not only one but multiple potential dimensions of emotion-inducing elements linked to threat communication.

Sample. The data were collected between 14 and 24 April 2023, with a final sample of 265 respondents. The survey was conducted online. Participants were recruited on the crowd-working platform clickworker. The targeted pool of respondents was restricted to people living in Germany and speaking German as their first language. An attention check (1+1=3) was passed by 96.96% of respondents. The final sample is predominantly male (61.02%), highly educated (77.74%), and rather young with a median age of 37.

Treatment. We used the same topic as in Pre-study 1: immigration presented as a

threat. Instead of a newspaper article, we used a transcribed excerpt of a fictitious parliamentary speech by a politician. On the first survey slide, both the treatment groups and the control group were given a brief introduction to the topic. This was a fact sheet about the upcoming discussion on Smart Borders. This section was similar to the final paragraph used in the treatment of Pre-study 1. At the end of the text, we presented respondents with a picture of the German Bundestag to provide an additional visual context of where the topic was discussed and increase respondents' attention. Afterwards, the participants who were randomly assigned to one of the two treatment groups (anger-inducing elements and anxiety-inducing elements) were then shown the fictitious speech on two subsequent survey slides. These two hypothetical speeches framed illegal immigration as a threat, each using different elements to elicit the intended emotion, as shown in Table 2.1. The key elements are highlighted in italics. On the second slide, we additionally showed a picture with the politician-actor giving the speech: In the anger-triggering treatment picture, the politician's facial expression was angry, while in the anxiety-triggering treatment picture, it was neutral. As we used the same treatment design in the main study, a detailed description of the study design can be found in section 2.4 and subsection B.1.6 for the detailed information about the treatment text.

Emotions. We slightly changed the emotion measure from Pre-study 1 and measured all key discrete emotions (anger, anxiety, disgust, joy, sadness, neutral) on an 11-point scale. The order of the discrete emotions was randomized. For us, the central emotions under study were still anger and anxiety for which we used two different codings: first, the original scale, a continuous coding and second, a dummy coding in which every value larger than zero was coded as 1, indicating that the respective emotion is present, and zeroes are kept as zeroes, i.e. the emotion is not present.

Outcome. We use support for the Smart Borders policy as the outcome measure, as established in Pre-study 1.

Results. Table B.3 shows linear and logistic regressions that estimate the effect of the treatment on anxiety and anger. Looking at the outcome anxiety, we only find a significant effect at $\alpha < 0.05$ of the anxiety-triggering treatment on anxiety measured as a dummy (Model 2). At $\alpha < 0.1$, both treatments have a significant effect on anxiety measured as a

continuous variable. As for the outcome anger, independent of the coding, both treatments increase the levels of anger significantly. We consider the effect sizes of both treatments substantial. These effects surpass those of Pre-study 1, which were almost zero. Since the sample size of the second pre-study is only 265 respondents, we are confident that we will find similar effects in the main study.

Table B.3: Pre-study 2: Effect of the treatment on anxiety and anger.

	Dependent variable:			
	Anxiety	Anxiety present	Anger	Anger present
	OLS	*logistic*	*OLS*	*logistic*
	(1)	(2)	(3)	(4)
Anger treatment	0.693*	0.585	1.639***	1.592***
	(0.412)	(0.357)	(0.464)	(0.459)
Anxiety treatment	0.712*	0.735**	1.084**	1.047***
	(0.385)	(0.338)	(0.433)	(0.363)
Constant	2.709***	0.676***	3.024***	0.711***
	(0.284)	(0.228)	(0.320)	(0.231)
Observations	265	265	264	264
R^2	0.016		0.048	
Log likelihood		−146.098		−119.919
Note:				*p<0.1; **p<0.05; ***p<0.01

Given the sample size, estimating a mediation model as we did in Pre-study 1 would result in highly underpowered statistical models. Alternatively, we examined whether the treatment has a direct effect on support for Smart Borders. As Table B.4 shows, this is not the case. In Models 2 and 3, we also control for anger and anxiety, for which we see

effects in the expected direction, with three of the four coefficients being significant. The treatment effect on the outcome remains insignificant, as expected.

Table B.4: Pre-study 2: Effect of the treatment, anxiety and anger, on support for Smart Borders.

	Dependent variable:		
	Support for Smart Borders		
	(1)	(2)	(3)
Anger treatment	0.503	0.763	0.790
	(0.502)	(0.505)	(0.514)
Anxiety treatment	0.424	0.527	0.583
	(0.468)	(0.466)	(0.475)
Anxiety		0.237***	
		(0.089)	
Anger		−0.274***	
		(0.080)	
Anxiety present			0.420
			(0.493)
Anger present			−1.304**
			(0.516)
Constant	−0.140	0.075	0.374
	(0.345)	(0.409)	(0.455)
Observations	265	264	264
R^2	0.005	0.050	0.029
Note:		*p<0.1; **p<0.05; ***p<0.01	

Manipulation checks. After the treatment (and following the measurement of the

outcome and the emotions), we asked respondents several questions about the treatment to assess whether they had taken and understood the treatment. In response to a three-option multiple choice question, 98.32% stated that the threat described in the excerpt from the speech concerned illegal immigrants. Also, a clear majority (>80%) identified the described temporal component in the treatment correctly for both treatments.

Nearly all (94.41%) of the respondents recalled the image of the politician wearing the suit. In the anger treatment, 77.92% perceived an angry facial expression and 12.99% a neutral one. In the anxiety treatment, 78.43% perceived a neutral facial expression and only some respondents report an non neutral emotion, with anger being mentioned most often (7.84%). Hence, most respondents correctly identified the emotion we intended to show. The mutual emergence of multiple emotions as the second most frequently reported emotion aligns well with our theoretical discussion, that emotions typically co-occur, although one tends to dominate. At the same time, it confirms the difficulty of measuring the two emotions in an empirically distinguishable way. We further validated the emotions expressed by the actor with an A.I. tool supporting the expected emotion-coding from our human coding(Face ++, see Figure B.5).

Discussion and learning from Pre-study 2. The results of our two pre-studies show that the measurement of the dependent variable is adequate and strong. Given the limited public awareness of the Smart Borders migration policy, it provides a suitable context for examining how preferences are shaped. Moreover, the results from the ranking-based measure further support our assumption that attitudes toward Smart Borders align with the classic freedom–security dichotomy, with security-oriented individuals tending to support the policy and those valuing freedom to oppose it. While Pre-study 1 did not reveal any mediation effects—likely due to the treatment's insufficient impact on the targeted emotion—Pre-study 2 demonstrates the effectiveness of revised treatment.

B.4 Further analysis

B.4.1 Direct effect

Table B.5: Results for the direct effect (any of the two threat communication treatments) on the two outcomes. Results are based on whole sample (model 1 & 3) and subsample used for PED (model 2& 4). We control for anger (present) and anxiety (present).

	Support for Smart Borders (binary)		**Ranking (binary)**	
	Model 1	**Model 2**	**Model 3**	**Model 4**
Treatment (threat)	0.328**	0.273*	0.161	0.107
	(0.106)	(0.121)	(0.128)	(0.147)
Constant	0.977***	0.848***	1.013***	1.002***
	(0.154)	(0.184)	(0.184)	(0.228)
N	1666	1248	1097	822
Log Likelihood	−1058.466	−794.045	−719.967	−535.190
AIC	2124.932	1596.091	1447.933	1078.380

***p $<$ .001; **p $<$ .01; *p $<$ .05

B.4.2 Descriptive multi-equation approach

In line with the multi-equation regression method based on Baron and Kenny (1986), each path—i.e., each arrow in Figure 2.2—is analyzed separately to estimate the indirect effects and is then compared to the direct effect without the mediator. To test our hypotheses, we conducted separate analyses for the two emotion mediators: (I) anxiety and (II) anger. For each emotion, we first estimated the direct effects using the model $Policypreference_i = \alpha_1 + \beta_1 Treat_i + \epsilon_{1i}$. Next, we assessed the indirect effects, i.e., the effect of the treatment

on the mediator, with $Emotion_i = \alpha_2 + \beta_2 Treat_i + \epsilon_{2i}$ and the effect of the mediator on the outcome with $Policypreference_i = \alpha_3 + \beta_3 Emotion_i + \epsilon_{3i}$. Finally, we estimated the total effect, which results from a direct effect measurement that includes the mediator variable as a control variable, $Policypreference_i = \alpha_4 + \beta_4 Treat_i + \gamma Anxiety_i + \epsilon_{4i}$. The difference between the direct effect and the total effect is supposed to compare the mediating effect path to the direct effect path. In cases of limited sample size, the bootstrapping method of Preacher and Hayes (2004) is advantageous and hence applied here. We estimate the indirect effect over 1,000 simulated random samples.

The multi-equation regression method rests on strong assumptions. Most importantly, it requires the assumption that the mediator is distributed randomly, conditional on both the treatment and any relevant confounders. This is referred to as the sequential ignorability assumption, which is difficult to fulfill. However, it has a significant impact on the results if it is not fulfilled. In the majority of cases, researchers do not reflect on or justify a potential fulfillment of the assumption in their mediation model. Even in the hypothetical case of an infinite sample and a perfectly randomized treatment, the fact that the mediator could be influenced by an unobserved variable that may also affect the dependent variable would still bias the results (Judd & Kenny 1981). In our case, we face the same difficulty as many researchers: the values we observe for the emotion mediator might be triggered by variables that also influence policy preferences, other than the treatment alone. Hence, also in our case, the sequential ignorability assumption is hard to fulfill and likely to be violated.

Results of the descriptive multi-equation approach. Figure B.10 present the results of the descriptive multi-equation mediation analysis for the two emotions, anxiety and anger . It shows the various pathways of the mediation model, including the direct path, represented by the average direct effects (ADE), the combined indirect and direct effects, represented by the total effect, and the average mediation effect (AME, total effect minus direct effect).

As the ADE shows for both emotion models, thetreatment, which frames immigration as a threat, increases respondents' support for Smart Borders. With regard to the indirect

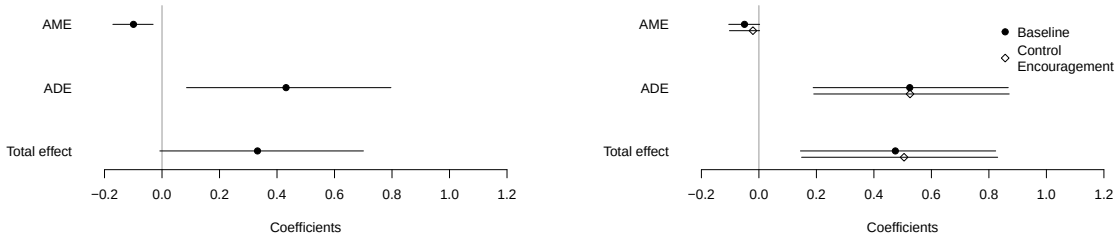
effect, the AME, the results presented in Figure B.10 reveal a marginally significant mediation effect of anger, but not of anxiety. In substance, the mediation effect is quite small. However, it is robust to various model modifications and tests. For example, we do not see an effect change when recoding the emotion variable from anger being present to anger being strong, or a continuous version of the anger indication. Including control variables (e.g., gender, age, left–right self-assessment) does not change the results. Therefore, even though it is small and only marginally significant, the positive mediation effect of anger on support for freedom is persistent, which implies a rejection of Smart Borders. In addition, the literature shows that emotion manipulation is relatively weak in a lab setting style such as the survey experiment in our study. This means that our study corresponds more to a least likely case.

However, the indirect effects of both emotions were found to be negative, indicating that both emotions reduce respondents' support for the Smart Border policy. This is in contrast to the hypotheses, as we expected the emotion anxiety to increase support for Smart Borders and only the emotion anger to reduce it. To gain insight into this unanticipated outcome of the mediator anxiety, and consequently the findings of the overall descriptive mediation analysis, we conducted supplementary assessments of both emotion measurements. The results demonstrate that anger is a prominent emotion when anxiety is present, whereas the reverse is not true. However, the descriptive insights suggest that the mediation effect of anxiety is absent due to the prevalence of anger. This finding is consistent with Marcus (2021), who attributes the evidence for anxiety in the literature to a lack of measurement of anger.

There are two points to consider when interpreting the results of the descriptive multi-equation approach. First, the methodological and analytical approach is descriptive. Therefore, any results must be interpreted in descriptive terms, bearing in mind that the knowledge that the treatment, i.e., threat communication, may evoke stronger or qualitatively different emotions among other groups of people. Hence, as the mediator is not manipulated by itself, the mediation approach captures an intended mediation effect rather than a causal mechanism.

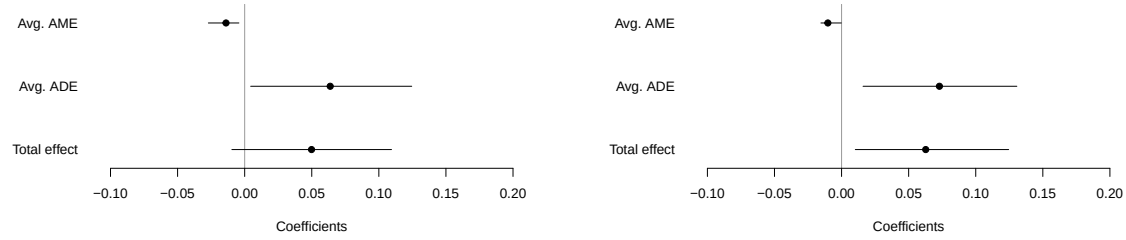
Second, the descriptive approach requires one strong underlying assumption. To con-

duct a descriptive mediation analysis, it is necessary to assume that the mediator is distributed randomly, conditional on the presence of confounding variables and the treatment in question (sequential ignorability assumption). It is challenging to fulfill this assumption. From a theoretical point, it seems highly reasonable to posit that there are unmeasured or unobservable variables that influence both the treatment and the emotion mediator or the outcome. Additional analyses using gender, age, and political ideology as control variables demonstrate no statistically significant changes. Nevertheless, this lends support to the sequential ignorability assumption, but does not satisfy it, as a multitude of additional observable and unobservable variables might have a relevant influence.



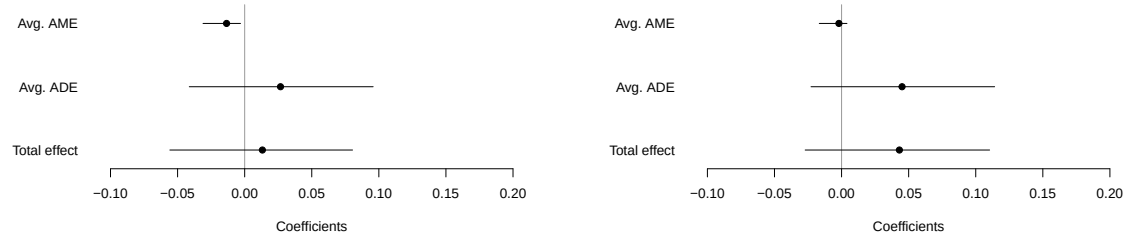
(a) Anger (b) Anxiety

Figure B.10: Results from the multi-equation approach testing support for the Smart Borders policy. Continuous measure of the policy and the emotions (present or not). Lines indicate 95%-confidence intervals. Coefficients indicated by the diamond are based on models in which we control for the AEMT/encouragement of the respective emotion.



(a) Anger (b) Anxiety

Figure B.11: Results from the multi-equation approach testing support for the Smart Borders policy. Binary measure of the policy and the emotions (present or not). Lines indicate 95%-confidence intervals.



(a) Anger (b) Anxiety

Figure B.12: Results from the multi-equation approach testing the importance ranking of the different arguments regarding freedom and security. The (binary) measure of the ranking-based variable indicates whether the two highest-ranked arguments favor security or freedom. Binary measure of emotion (present or not). Lines indicate 95%-confidence intervals.

Outcome	Mediator	Controls	ACME	pval	N
Smart borders (cont.)	Anger (cont.)		-0.11	0	1227
Smart borders (binary)	Anger (cont.)		-0.02	0	991
Ranking (binary)	Anger (cont.)		-0.02	0	782
Smart borders (cont.)	Anger present (binary)		-0.10	0	1227
Smart borders (binary)	Anger present (binary)		-0.01	0	991
Smart borders (cont.)	Anger (cont.)	Yes	-0.10	0	1190
Smart borders (binary)	Anger (cont.)	Yes	-0.02	0	967
Ranking (binary)	Anger (cont.)	Yes	-0.02	0	755
Smart borders (binary)	Anger strong (binary)	Yes	-0.02	0	967
Smart borders (cont.)	Anger strong (binary)		-0.06	0.002	1227
Smart borders (binary)	Anger strong (binary)		-0.01	0.002	991
Smart borders (cont.)	Anger present (binary)	Yes	-0.05	0.002	1190
Smart borders (binary)	Anger present (binary)	Yes	-0.01	0.002	967
Smart borders (cont.)	Anger strong (binary)	Yes	-0.04	0.004	1190
Ranking (binary)	Anger present (binary)		-0.01	0.008	782
Ranking (binary)	Anger present (binary)	Yes	-0.01	0.018	755
Ranking (binary)	Anger strong (binary)		-0.01	0.02	782
Ranking (binary)	Anger strong (binary)	Yes	-0.01	0.026	755

Table B.6: Significance test via bootstrapping by Imai, Keele, and Yamamoto (2010) for Baron and Kenny (1986) mediation analysis. Different anger models and the related ACME, p-value, and N. All models are significant below alpha=0.05. However, effect sizes are very small. Controls are parallel encouragement, anger present, gender dummy, age, left–right self-placement.

Outcome	Mediator	Controls	ACME	pval	N
Smart borders (cont.)	Anx. (cont.)		-0.04	0.02	1265
Smart borders (binary)	Anx. (cont.)		-0.01	0.022	1043
Smart borders (binary)	Anx. present (binary)		-0.01	0.04	1043
Smart borders (cont.)	Anx. present (binary)		-0.04	0.062	1265
Ranking (binary)	Anx. (cont.)		-0.01	0.114	784
Smart borders (cont.)	Anx. strong (binary)		-0.02	0.292	1265
Ranking (binary)	Anx. present (binary)		-0.01	0.326	784
Smart borders (binary)	Anx. strong (binary)		-0.01	0.358	1043
Smart borders (binary)	Anx. (cont.)	Yes	-0.00	0.5	1018
Smart borders (cont.)	Anx. (cont.)	Yes	-0.01	0.504	1232
Ranking (binary)	Anx. strong (binary)		0.00	0.632	784
Smart borders (cont.)	Anx. present (binary)	Yes	0.00	0.638	1232
Ranking (binary)	Anx. (cont.)	Yes	-0.00	0.652	761
Smart borders (cont.)	Anx. strong (binary)	Yes	-0.00	0.854	1232
Smart borders (binary)	Anx. strong (binary)	Yes	-0.00	0.868	1018
Ranking (binary)	Anx. present (binary)	Yes	0.00	0.922	761
Smart borders (binary)	Anx. present (binary)	Yes	-0.00	0.954	1018
Ranking (binary)	Anx. strong (binary)	Yes	-0.00	0.972	761

Table B.7: Significance test via bootstrapping by Imai, Keele, and Yamamoto (2010) for Baron and Kenny (1986) mediation analysis. Different anxiety models and the related ACME, p-value, and N. Three out of 18 models are significant below an alpha of 0.05. Controls are parallel encouragement, anger present, gender dummy, age, left–right self-placement.

B.4.3 Implicit mediation approach

Unlike the analytical-based multi-equation regression approach, this approach is design-based. Rather than estimating both direct and indirect effects of the treatment on the outcome, it aims to design an experimental treatment that affects the outcome only through mediators (Pirlott & MacKinnon, 2016; Spencer etal., 2005), the indirect ACME in Figure 2.2. Hence, analytically, the approach can be seen as an instrumental variable approach, in which the treatment is the instrument that influences the dependent variable through the mediator, which is not assigned at random. Equal to instrumental designs, the analytical test follows a two-stage least squares model (2SLS). Although recent literature advises testing multiple, if not all, potential mediators (Bullock & Green 2021), due to practical limitations, we only test the two mediators we expect from our theory.

Because our model is comparable to the instrumental variable approach, the assumptions underlying that approach must also be met in our case. While the assumptions of independence and relevance are easily justifiable, similar to natural experiments that rely on instruments, the exclusion restriction is what challenges the design. Following the exclusion restriction, the threat treatment may affect the dependent variable exclusively via the mediator and not through any other element. The exclusion restriction is an assumption that can only be argued for and not be tested. Put differently, the design is unbiased only under the strong assumption of full mediation. In the presence of partial mediation, the estimates are biased.

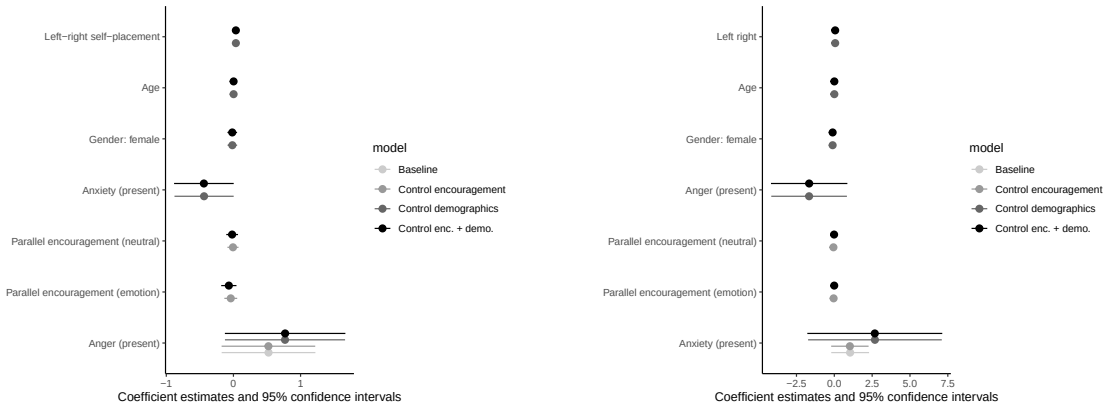
Results: Implicit mediation approach. The results of the implicit mediation approach are presented in Figure B.13. They show the effect of the respective emotion on support for the Smart Borders policy, instrumented by the treatment, i.e., threat communication. Hence, the results exclusively represent the indirect mediation.

The examination of indirect mediation, as modeled using 2SLS, indicates that there are no statistically significant effects for either the anxiety or anger models. These findings indicate that there is no full mediation, a conclusion that aligns with the results of the descriptive multi-equation approach. In the multi-equation model, even in the case of the significant mediation path via anger, the results for the direct path indicate only a

minor difference between the ADE and the total effect.This suggests a partial mediation. However, partial mediation cannot be tested with the implicit mediation approach. In other words, one core assumption for the implicit mediation approach, using a 2SLS model, is violated. Following the exclusion restriction, the treatment may affect the dependent variable exclusively through the mediator and not through any other element, including the direct effect. Hence, the results are biased.

Based on our hypotheses, we expected full mediation. A careful interpretation of the results from the implicit mediation approach is that full mediation is unlikely in our model, although we cannot rule out partial or no mediation.

The results of the weak instruments test offer a more profound understanding of the relationship between the treatment and the mediator. The significant test result provides evidence against the hypothesis that the instrument is weak (see Table B.8 and Table B.9). In other words, threat communication appears to have a relevant effect on the respective emotion—on anger in the anger model and on anxiety in the anxiety model. Although this cannot be tested with our implicit mediation approach, these results suggest that the absence of an indirect mediation effect is more likely to be due to the second path of the indirect effect in the mediation-triangle, namely between the emotion mediator and policy preferences. This implies that anger and anxiety may have an unrealized, more absent effect on policy preferences. An additional 2SLS test (reported in Table B.10 and Table B.11 of the Appendix), testing for the effect of each mediator on the dependent variable, which in turn is instrumented by the encouragement, also points in the same direction. Neither anxiety nor anger has a significant effect on the outcome variable, according to the results.



(a) Anger (b) Anxiety

Figure B.13: Results 2SLS. The treatment (threat communication) is used as the instrument. In each experiment, the mediator is either anger or anxiety, depending on the emotional focus of the treatment. Both the outcome (support for Smart Borders) and the mediator (anger/anxiety present) are operationalized as binary variables. In the additional models, we also control for the encouragement, respondents' demographics, and respondents' indicated strength of the other emotion. Bars indicate 95% confidence intervals.

Table B.8: 2SLS results for the anger experiment.

	Support for Smart Borders (binary)			
	Model 1	**Model 2**	**Model 3**	**Model 4**
Anger (present)	0.523	0.521	0.768	0.770
	(0.356)	(0.355)	(0.456)	(0.457)
Parallel encouragement (emotion)		−0.040		−0.068
		(0.049)		(0.058)
Parallel encouragement (neutral)		−0.007		−0.019
		(0.042)		(0.045)
Anxiety (present)			−0.437	−0.440
			(0.225)	(0.226)
Gender: female			−0.016	−0.017
			(0.036)	(0.037)
Age			0.003*	0.003*
			(0.001)	(0.001)
Left-right self-placement			0.036***	0.036***
			(0.009)	(0.009)
Constant	0.227	0.242	0.067	0.096
	(0.294)	(0.284)	(0.223)	(0.209)
Weak instruments statistic	15.939	16.05	14.173	14.237
Weak instruments p-value	0	0	0	0
Wu-Hausman statistic	4.519	4.509	5.765	5.762
Wu-Hausman p-value	0.034	0.034	0.017	0.017
N	991	991	967	967
R-squared	−0.267	−0.264	−0.339	−0.337
Adj. R-squared	−0.268	−0.268	−0.346	−0.347
Residual Std. Error	0.534	0.534	0.550	0.550
	(df = 989)	(df = 987)	(df = 961)	(df = 959)

***p < .001; **p < .01; *p < .05

Table B.9: 2SLS results for the anxiety experiment.

	Support for Smart Borders (binary)			
	Model 1	**Model 2**	**Model 3**	**Model 4**
Anxiety (present)	1.047	1.029	2.684	2.676
	(0.636)	(0.630)	(2.251)	(2.272)
Parallel encouragement (emotion)		−0.047		−0.005
		(0.049)		(0.078)
Parallel encouragement (neutral)		−0.058		−0.014
		(0.049)		(0.079)
Anger (present)			−1.666	−1.661
			(1.273)	(1.286)
Gender: female			−0.110	−0.110
			(0.089)	(0.089)
Age			0.002	0.002
			(0.002)	(0.002)
Left right			0.058*	0.058*
			(0.025)	(0.025)
Constant	−0.198	−0.152	−0.548	−0.538
	(0.514)	(0.506)	(0.941)	(0.966)
Weak instruments statistic	6.852	6.883	1.828	1.785
Weak instruments p-value	0.009	0.009	0.177	0.182
Wu-Hausman statistic	6.119	5.96	6.329	6.155
Wu-Hausman p-value	0.014	0.015	0.012	0.013
N	1043	1043	1018	1018
R-squared	−0.878	−0.847	−3.257	−3.237
Adj. R-squared	−0.880	−0.853	−3.278	−3.266
Residual Std. Error	0.655	0.651	0.989	0.988
	(df = 1041)	(df = 1039)	(df = 1012)	(df = 1010)

***p < .001; **p < .01; *p < .05

Table B.10: 2SLS results for the anger experiment using the parallel encouragement as instrument.

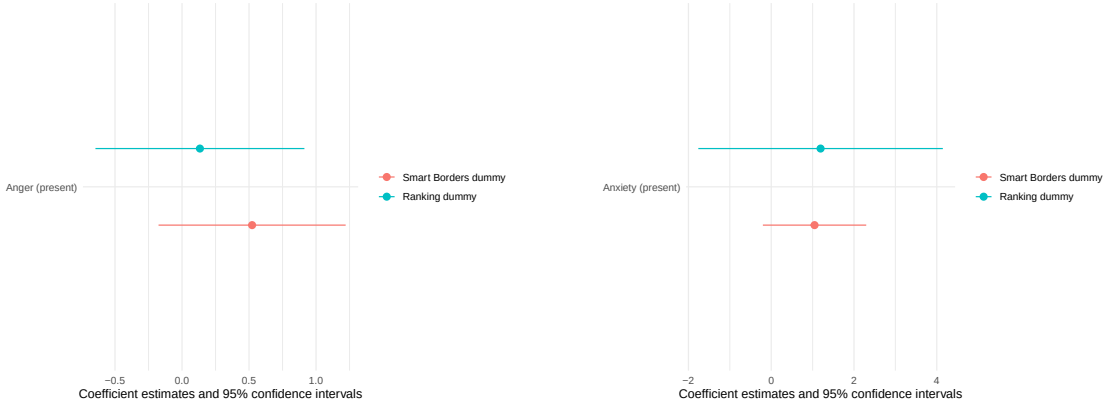
	Support for Smart Borders (binary)		
	Model 1	**Model 2**	**Model 3**
Anger (present)	−0.026	−0.027	−0.042
	(0.494)	(0.492)	(0.425)
Treatment		0.053	0.063
		(0.056)	(0.045)
Anxiety (present)			−0.049
			(0.207)
Gender: female			−0.004
			(0.031)
Age			0.002
			(0.001)
Left–right self-placement			0.042***
			(0.008)
Constant	0.681	0.656	0.400*
	(0.408)	(0.384)	(0.190)
Weak instruments statistic	3.218	3.286	5.874
Weak instruments p-value	0.04	0.038	0.003
Wu-Hausman statistic	0.052	0.062	0.078
Wu-Hausman p-value	0.82	0.803	0.78
N	991	991	967
R-squared	0.004	0.007	0.046
Adj. R-squared	0.003	0.005	0.040
Residual Std. Error	0.474 (df = 989)	0.473 (df = 988)	0.464 (df = 960)

***p < .001; **p < .01; *p < .05

Table B.11: 2SLS results for the anxiety experiment using the parallel encouragement as instrument.

	Support for Smart Borders (binary)		
	Model 1	**Model 2**	**Model 3**
Anxiety (present)	−5.628	−4.468	3.735
	(17.938)	(11.951)	(8.823)
Treatment		0.352	−0.029
		(0.770)	(0.258)
Anger (present)			−2.256
			(4.958)
Gender: female			−0.141
			(0.269)
Age			0.003
			(0.006)
Left–right self-placement			0.068
			(0.080)
Constant	5.190	4.080	−0.969
	(14.481)	(9.270)	(3.539)
Weak instruments statistic	0.05	0.072	0.103
Weak instruments p-value	0.951	0.931	0.902
Wu-Hausman statistic	2.098	1.882	1.384
Wu-Hausman p-value	0.148	0.17	0.24
N	1043	1043	1018
R-squared	−20.874	−12.908	−6.357
Adj. R-squared	−20.895	−12.934	−6.401
Residual Std. Error	2.237 (df = 1041)	1.785 (df = 1040)	1.301 (df = 1011)

$^{***}p < .001$; $^{**}p < .01$; $^{*}p < .05$



(a) Anger (b) Anxiety

Figure B.14: 2SlS results for three outcome variables: Binary measure of support for the Smart Borders policy, ranking of arguments, and support for security or freedom. Binary measure of emotion (present or not). Lines indicate 95%-confidence intervals.

Outcome	Mediator	Controls	ACME	pval	N
Smart borders (cont.)	Anger strong (binary)	Yes	3.97	0.06	1190
Smart borders (cont.)	Anger present (binary)	Yes	6.08	0.06	1190
Smart borders (cont.)	Anger (cont.)	Yes	0.67	0.07	1190
Smart borders (binary)	Anger strong (binary)	Yes	0.47	0.09	967
Smart borders (binary)	Anger present (binary)	Yes	0.77	0.09	967
Smart borders (cont.)	Anger present (binary)		3.86	0.10	1227
Smart borders (binary)	Anger (cont.)	Yes	0.09	0.10	967
Smart borders (cont.)	Anger (cont.)		0.46	0.10	1227
Smart borders (cont.)	Anger strong (binary)		3.21	0.10	1227
Smart borders (binary)	Anger strong (binary)		0.38	0.14	991
Smart borders (binary)	Anger present (binary)		0.52	0.14	991
Smart borders (binary)	Anger (cont.)		0.06	0.15	991
Ranking (binary)	Anger strong (binary)	Yes	0.13	0.62	755
Ranking (binary)	Anger present (binary)	Yes	0.22	0.62	755
Ranking (binary)	Anger (cont.)	Yes	0.02	0.62	755
Ranking (binary)	Anger strong (binary)		0.09	0.73	782
Ranking (binary)	Anger present (binary)		0.13	0.74	782
Ranking (binary)	Anger (cont.)		0.01	0.74	782

Table B.12: 2SLS results for the mediation effect of anger. Different models and the related ACME, p-value, and N. No model is significant below an alpha=0.05. Controls are parallel encouragement, anxiety present, gender dummy, age, and left–right self-placement.

Outcome	Mediator	Controls	ACME	pval	N
Smart borders (cont.)	Anx. (cont.)		1.25	0.10	1265
Smart borders (cont.)	Anx. present (binary)		9.74	0.10	1265
Smart borders (binary)	Anx. present (binary)		1.05	0.10	1043
Smart borders (binary)	Anx. (cont.)		0.15	0.13	1043
Smart borders (binary)	Anx. present (binary)	Yes	2.68	0.24	1018
Smart borders (cont.)	Anx. strong (binary)		14.38	0.27	1265
Smart borders (binary)	Anx. strong (binary)		1.89	0.32	1043
Smart borders (cont.)	Anx. present (binary)	Yes	27.36	0.33	1232
Smart borders (cont.)	Anx. (cont.)	Yes	3.54	0.36	1232
Ranking (binary)	Anx. (cont.)		0.12	0.38	784
Smart borders (binary)	Anx. (cont.)	Yes	0.47	0.41	1018
Ranking (binary)	Anx. present (binary)		1.19	0.43	784
Ranking (binary)	Anx. (cont.)	Yes	0.41	0.54	761
Ranking (binary)	Anx. strong (binary)		2.03	0.62	784
Smart borders (cont.)	Anx. strong (binary)	Yes	51.09	0.70	1232
Smart borders (binary)	Anx. strong (binary)	Yes	10.96	0.82	1018
Ranking (binary)	Anx. present (binary)	Yes	10.87	0.83	761
Ranking (binary)	Anx. strong (binary)	Yes	-263.80	0.99	761

Table B.13: 2SLS results for the mediation effect of anxiety (Anx.). Different models and the related ACME, p-value, and N. No model is significant below an alpha=0.05. Controls are parallel encouragement, anger present, gender dummy, age, and left–right self-placement.

Table B.14: 2SLS based on subsample used for PED. Model 1 & 2 for anger experiment, model 3 & 4 for anxiety experiment.

	Support for Smart Borders (binary)			
	Model 1	**Model 2**	**Model 3**	**Model 4**
Anger (present)	0.176	0.701		
	(0.436)	(0.961)		
Parallel encouragement (emotion)		−0.174		−0.457
		(0.201)		(0.380)
Parallel encouragement (neutral)		0.416		0.898
		(0.365)		(0.795)
Anxiety (present)			1.192	2.046
			(0.916)	(1.891)
Constant	0.521	0.099	−0.314	−0.968
	(0.358)	(0.765)	(0.750)	(1.518)
Weak instruments statistic	8.405	2.679	3.754	1.798
Weak instruments p-value	0.004	0.102	0.053	0.18
Wu-Hausman statistic	0.435	0.782	4.124	4.114
Wu-Hausman p-value	0.51	0.377	0.043	0.043
N	736	736	765	765
R-squared	−0.045	−0.271	−1.083	−2.256
Adj. R-squared	−0.046	−0.276	−1.086	−2.269
Residual Std. Error	0.483 (df = 734)	0.533 (df = 732)	0.684 (df = 763)	0.856 (df = 761)

$^{***}p < .001$; $^{**}p < .01$; $^{*}p < .05$

B.4.4 Causal mediation approach

	Lower Bound	Upper Bound	Lower Bound	Upper Bound
Population ACME (control)	-0.282	0.056	-0.362	0.050
Complier ACME (control)	-0.338	0.091	-0.456	0.084
Population ACME (treated)	-0.237	0.218	-0.255	0.233
Complier ACME (treated)	-0.191	0.332	-0.198	0.357

Table B.15: Results from the anxiety PED.

	Lower Bound	Upper Bound	Lower Bound	Upper Bound
Population ACME (control)	-0.222	0.146	-0.136	0.179
Complier ACME (control)	-0.179	0.230	-0.058	0.296
Population ACME (treated)	-0.199	0.248	-0.245	0.187
Complier ACME (treated)	-0.415	0.285	-0.510	0.233

Table B.16: Results from the anger PED.

Appendix C

Chapter 3

C.1 Method

C.1.1 Experimental setup

- Binary variable which candidate the respondents chose.
- Binary variable if the selected candidate should be allowed to speak in public about these policy issues.
- Binary variable if the selected candidate should work together with other politicians on these policies.

After step 2:

- Binary variable that measures if respondents stay with their initial candidate choice or not.
- Binary variable if the **first** selected candidate should be allowed to speak in public about these policy issues.
- Binary variable if the **first** selected candidate should work together with other politicians on these policies.

C.1.2 Questionnaire

1. Generally speaking, how important is security for you? (0 - not important at all; 10 - very important, Don't know)

2. How important are civil liberties to you? (0 - not important at all; 10 - very important, Don't know)

3. Where do you place your preferences between security and civil liberties? (-5 in favor of freedom; 5 in favor of security, Don't know)

4. How do you like the following party? (Feeling thermometer for every relevant party in the country.) (0 - Strongly dislike, 10 - Strongly like, Don't know)

5. Which party did you vote for in the last election? (List of all relevant parties in the country)

6. Conjoint table with two candidates and only their policy stances (without party affiliation).

   (a) Which candidate would you vote for? (A, B)

   (b) Should your selected candidate (A/B) be allowed to speak in public about these policy issues? (Yes, No, Don't know)

   (c) Should your selected candidate (A/B) work with other politicians on these policy issues? (Yes, No, Don't know)

   (d) How likely is it that you will vote for candidate A? (0 - very unlikely; 10 - very likely, Don't know)

   (e) How likely is it that you will vote for candidate B? (0 - very unlikely; 10 - very likely, Don't know)

   (f) Which party do you think candidate A is from? Please make a guess. (List of relevant parties, Independent, Don't know.)

   (g) And which party do you think candidate B is from? Please make a guess. (List of relevant parties, Independent, Don't know.)

7. You will now see the same two candidates with their policy positions. In addition, you will see their party ids. [Reveal of party ids of the candidates.]

   (a) Would you still like to vote for candidate (A/B) or do you prefer to vote for candidate (A/B) now? (A/B) [Alternative question that is assigned to a tenth of the respondents: Which candidate would you vote for? (A/B)]

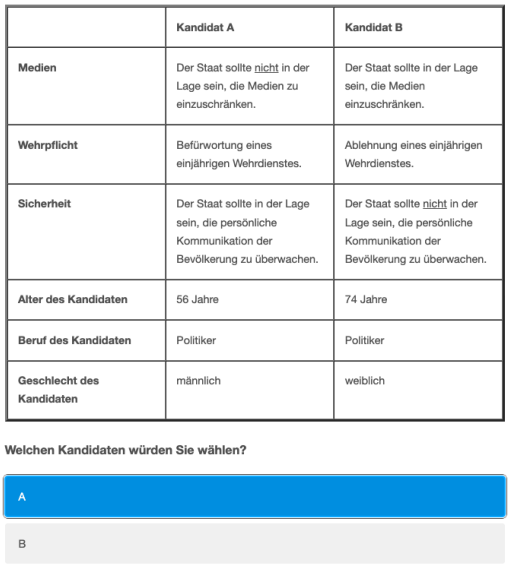
   (b) Should your first selected candidate (A/B) be allowed to speak in public about the topic? (Yes, No, Don't know)

   (c) Should your first selected candidate (A/B) work with other politicians on these policy issues? (Yes, No, Don't know)

8. Please take another look at the policy proposals by candidate (A/B)[not selected candidate in the first step, in-party candidate in second step]. In your opinion, how likely is it that a politician from the following party will make such a policy proposal? [In-party] (0 - very unlikely; 10 - very likely, Don't know)

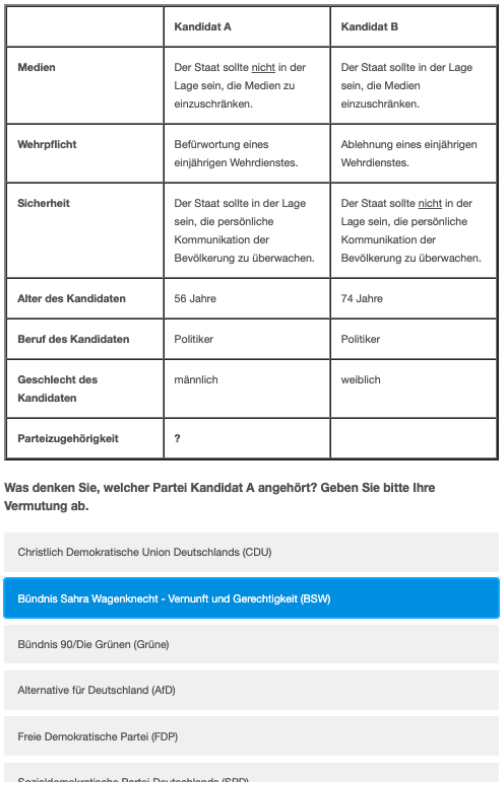
9. Repeat first conjoint table (question 7) with switched profiles. Which candidate would you vote for? (C/D)

C.1.3 Implementation in the online survey



	Kandidat A	Kandidat B
Medien	Der Staat sollte nicht in der Lage sein, die Medien zu einzuschränken.	Der Staat sollte in der Lage sein, die Medien einzuschränken.
Wehrpflicht	Befürwortung eines einjährigen Wehrdienstes.	Ablehnung eines einjährigen Wehrdienstes.
Sicherheit	Der Staat sollte in der Lage sein, die persönliche Kommunikation der Bevölkerung zu überwachen.	Der Staat sollte nicht in der Lage sein, die persönliche Kommunikation der Bevölkerung zu überwachen.
Alter des Kandidaten	56 Jahre	74 Jahre
Beruf des Kandidaten	Politiker	Politiker
Geschlecht des Kandidaten	männlich	weiblich

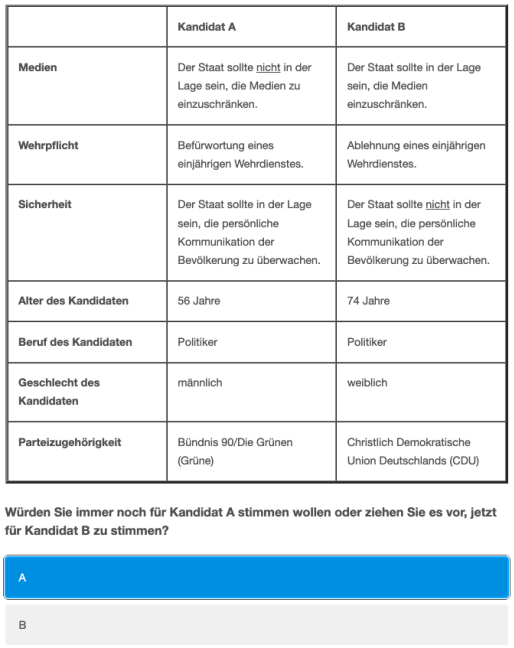
Figure C.1: First step of the experiment (Question 6a).



	Kandidat A	Kandidat B
Medien	Der Staat sollte nicht in der Lage sein, die Medien zu einzuschränken.	Der Staat sollte in der Lage sein, die Medien einzuschränken.
Wehrpflicht	Befürwortung eines einjährigen Wehrdienstes.	Ablehnung eines einjährigen Wehrdienstes.
Sicherheit	Der Staat sollte in der Lage sein, die persönliche Kommunikation der Bevölkerung zu überwachen.	Der Staat sollte nicht in der Lage sein, die persönliche Kommunikation der Bevölkerung zu überwachen.
Alter des Kandidaten	56 Jahre	74 Jahre
Beruf des Kandidaten	Politiker	Politiker
Geschlecht des Kandidaten	männlich	weiblich
Parteizugehörigkeit	?	

Figure C.2: Party guess after first step of the experiment for smoother transition to step two (Question 6f).

Figure C.3: Announcement of the upcoming party reveal for the second step of the experiment (separate window before Question 7a).



	Kandidat A	Kandidat B
Medien	Der Staat sollte nicht in der Lage sein, die Medien zu einzuschränken.	Der Staat sollte in der Lage sein, die Medien einzuschränken.
Wehrpflicht	Befürwortung eines einjährigen Wehrdienstes.	Ablehnung eines einjährigen Wehrdienstes.
Sicherheit	Der Staat sollte in der Lage sein, die persönliche Kommunikation der Bevölkerung zu überwachen.	Der Staat sollte nicht in der Lage sein, die persönliche Kommunikation der Bevölkerung zu überwachen.
Alter des Kandidaten	56 Jahre	74 Jahre
Beruf des Kandidaten	Politiker	Politiker
Geschlecht des Kandidaten	männlich	weiblich
Parteizugehörigkeit	Bündnis 90/Die Grünen (Grüne)	Christlich Demokratische Union Deutschlands (CDU)

Figure C.4: Second step of the experiment (Question 7a).

C.1.4 Selected countries and parties

Table C.1: Countries under study and selected parties.

Country	Party
Czech Republic	ANO, ODS, STAN, KDU-ČSL, SPD, Piráti, PSA
Germany	CDU, CSU, SPD, FDP, Left, Greens, AfD, BSW
Italy	Fdl, PD, M5S, FI, Lega, AVS, A-IV
Ireland	Fine Gael, Fianna Fáil, Sinn Féin, Na Daonlathaithe Sóisialta, Comhaontas Glas
Netherlands	PVV, GL PvdA, VVD, CDA, D66, PvdD, NSC, BBB
Poland	KO, PiS, KON, TD, Left
Spain	PP, PSOE, Vox, Summar
Sweden	S, M, SD, V, MP, C, KD, L
United Kingdom	Conservative Party, Green Party of England and Wales, Labour Party, Liberal Democrats, Reform UK, Scottish National Party

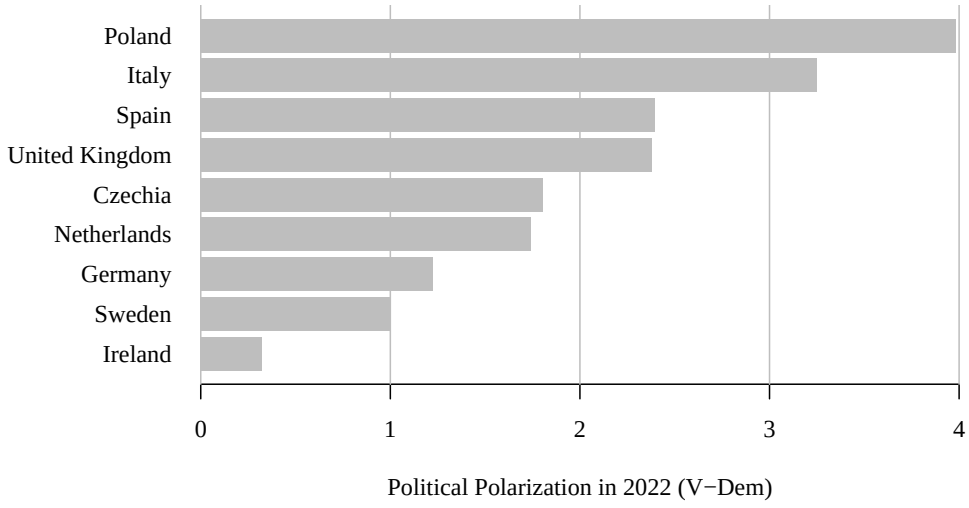


Figure C.5: Political polarization in countries under study in 2022 based on V-Dem data (Coppedge & et. al 2023).

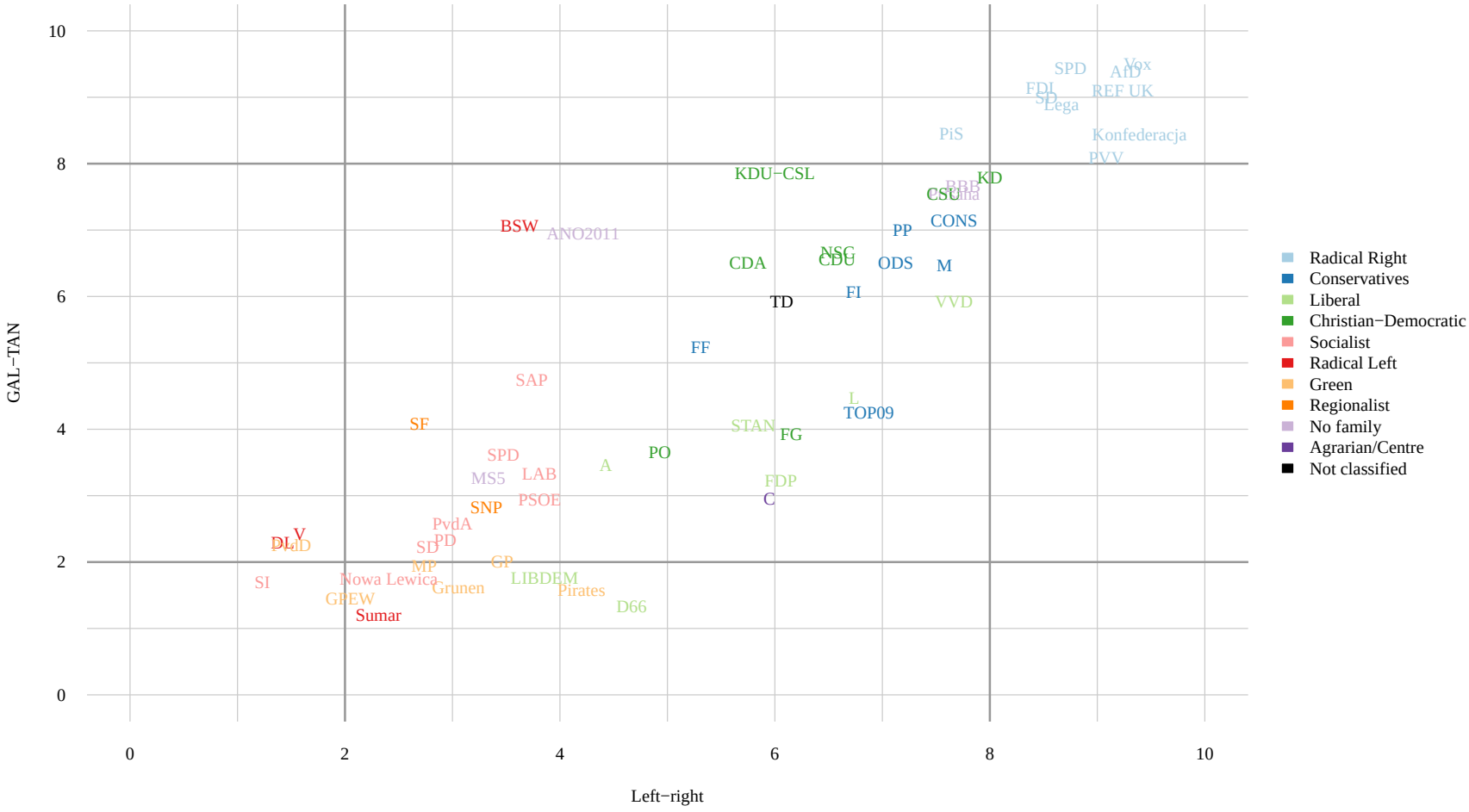


Figure C.6: Three classification of parties (party family, general left-right, GAL-TAN) based on Chapel Hill Expert Survey (Rovny et al. 2025). < 2 and > 8 used as cut-off points to classify parties as extreme on the respective dimension.

C.1.5 Equation for second and third DV

Regression equation to test the second outcome variable "politician should be allowed to talk about these topics". The regression equation for the third outcome variable "politician should be allowed to work with other politicians on these topics" is analogue to that.

$$
\begin{aligned}
logit(postallowedtospeak_i) = \theta_0 & \\
& + \theta_1(likeInparty_i - likeOutparty_i) \\
& + \theta_2 Security[liberal]_i \\
& + \theta_3 Media[liberal]_i \\
& + \theta_4 Service[liberal]_i \\
& + \theta_5 Gender[female]_i \\
& + \theta_6 Age[56]_i \\
& + \theta_7 Age[74]_i \\
& + \theta_8 Occupation[lawyer]_i \\
& + \theta_9 Occupation[entrepreneur]_i \\
& + \theta_10 Occupation[politician]_i \\
& + \theta_{11} Occupation[activist]_i
\end{aligned}
$$

C.2 Results

C.2.1 Descriptive statistics

Table C.2: Sample statistics for the whole sample.

Variable	N	Mean	Std. Dev.	Min	Pctl. 25	Pctl. 75	Max
Gender	11894						
... Female	6210	52%					
... Male	5652	48%					
... Other	24	0%					
... Prefer not to say	8	0%					
Age	11796						
... 18-24	1153	10%					
... 25-34	2043	17%					
... 35-44	2221	19%					
... 45-54	2326	20%					
... 55-64	2266	19%					
... 65-75	1787	15%					
Education	11894						
... not high	6262	53%					
... high	5632	47%					
Left-right	11194	5.1	2.6	0	3	7	10

Table C.3: Sample statistics by country.

country_f	cz			de			es			irl			it			nl			pl			swe			uk		
Variable	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD
Gender	1508			1549			1554			682			1519			1434			695			1342			1611		
... Female	747	50%		791	51%		776	50%		439	64%		747	49%		762	53%		376	54%		747	56%		825	51%	
... Male	758	50%		755	49%		772	50%		241	35%		768	51%		668	47%		316	45%		591	44%		783	49%	
... Other	3	0%		1	0%		4	0%		0	0%		4	0%		3	0%		3	0%		4	0%		2	0%	
... Prefer not to say	0	0%		2	0%		2	0%		2	0%		0	0%		1	0%		0	0%		0	0%		1	0%	
Age	1486			1543			1545			679			1510			1425			678			1330			1600		
... 18-24	160	11%		101	7%		179	12%		30	4%		185	12%		85	6%		175	26%		120	9%		118	7%	
... 25-34	251	17%		260	17%		235	15%		109	16%		215	14%		197	14%		153	23%		237	18%		386	24%	
... 35-44	303	20%		260	17%		298	19%		167	25%		254	17%		255	18%		139	21%		283	21%		262	16%	
... 45-54	318	21%		263	17%		373	24%		192	28%		326	22%		280	20%		109	16%		269	20%		196	12%	
... 55-64	248	17%		340	22%		288	19%		127	19%		316	21%		289	20%		70	10%		263	20%		325	20%	
... 65-75	206	14%		319	21%		172	11%		54	8%		214	14%		319	22%		32	5%		158	12%		313	20%	
Education	1508			1549			1554			682			1519			1434			695			1342			1611		
... not high	999	66%		396	26%		810	52%		225	33%		1152	76%		793	55%		487	70%		598	45%		802	50%	
... high	509	34%		1153	74%		744	48%		457	67%		367	24%		641	45%		208	30%		744	55%		809	50%	
Left-right	1371	5.6	2.3	1518	4.8	2	1506	4.6	2.7	634	4.6	2.1	1362	5	3.1	1379	5.6	2.4	649	5.6	2.6	1283	5.3	2.9	1492	5.1	2.3

C.2.2 Tables for main figures

Table C.4: Main regression results from the switch-experiment. Multilevel models with random intercept for countries.

	Dependent variable:		
	Change choice after party reveal		
	(1)	(2)	(3)
Affective polarization	0.055***		0.055***
	(0.002)		(0.002)
Unequal security		−0.069***	−0.071***
		(0.010)	(0.010)
Unequal media		−0.100***	−0.100***
		(0.010)	(0.010)
Unequal service		−0.081***	−0.081***
		(0.010)	(0.010)
Unequal gender		−0.019	−0.019
		(0.010)	(0.010)
Unequal age		−0.012	−0.014
		(0.011)	(0.010)
Unequal occupation		−0.003	−0.004
		(0.013)	(0.012)
Constant	0.176***	0.572***	0.324***
	(0.014)	(0.022)	(0.021)
Observations	8,848	8,848	8,848
Log Likelihood	−5,790.140	−6,252.974	−5,695.028
Akaike Inf. Crit.	11,588.280	12,523.950	11,410.060
Bayesian Inf. Crit.	11,616.630	12,587.740	11,480.940
Note:			*p<0.05; **p<0.01; ***p<0.001

Table C.5: Main regression results from the switch-experiment. Linear probability multilevel models with random intercept for countries.

	Dependent variable:		
	Change choice after party reveal		
	(1)	(2)	(3)
Affective polarization	0.055***		0.055***
	(0.002)		(0.002)
Unequal security		−0.069***	−0.071***
		(0.010)	(0.010)
Unequal media		−0.100***	−0.100***
		(0.010)	(0.010)
Unequal service		−0.081***	−0.081***
		(0.010)	(0.010)
Unequal gender		−0.019	−0.019
		(0.010)	(0.010)
Unequal age		−0.012	−0.014
		(0.011)	(0.010)
Unequal occupation		−0.003	−0.004
		(0.013)	(0.012)
Constant	0.176***	0.572***	0.324***
	(0.014)	(0.022)	(0.021)
Observations	8,848	8,848	8,848
Log Likelihood	−5,790.140	−6,252.974	−5,695.028
Akaike Inf. Crit.	11,588.280	12,523.950	11,410.060
Bayesian Inf. Crit.	11,616.630	12,587.740	11,480.940

Note: *p<0.05; **p<0.01; ***p<0.001

Table C.6: Regression results for further dependent variables: 'allowed to speak' and 'should work together'. Multilevel models with random intercept for countries.

	Dependent variable:			
	Denial: allowed to speak		Denial: should work together	
	(1)	(2)	(3)	(4)
Affective polarization	0.172***	0.174***	0.187***	0.189***
	(0.017)	(0.017)	(0.018)	(0.018)
Security: pro surveillance		0.419***		0.425***
		(0.101)		(0.107)
Media: pro restriction		0.256*		0.215*
		(0.102)		(0.108)
National service: pro		−0.061		−0.108
		(0.101)		(0.107)
Gender: male		−0.033		−0.184
		(0.101)		(0.108)
Age: 56 years		0.082		0.343**
		(0.120)		(0.128)
Age: 74 years		−0.055		0.025
		(0.128)		(0.140)
Occupation: employee		0.050		−0.170
		(0.159)		(0.170)
Occupation: entrepreneur		−0.054		−0.201
		(0.163)		(0.172)
Occupation: lawyer		−0.265		−0.296
		(0.167)		(0.171)
Occupation: politician		−0.007		−0.026
		(0.162)		(0.166)
Constant	−3.924***	−4.143***	−4.149***	−4.304***
	(0.138)	(0.211)	(0.144)	(0.221)
Observations	8,954	8,954	8,778	8,778
Log Likelihood	−1,634.933	−1,620.806	−1,478.263	−1,460.841
Akaike Inf. Crit.	3,275.866	3,267.612	2,962.526	2,947.682
Bayesian Inf. Crit.	3,297.165	3,359.910	2,983.766	3,039.722

Note: *p<0.05; **p<0.01; ***p<0.001

C.2.3 Results by country

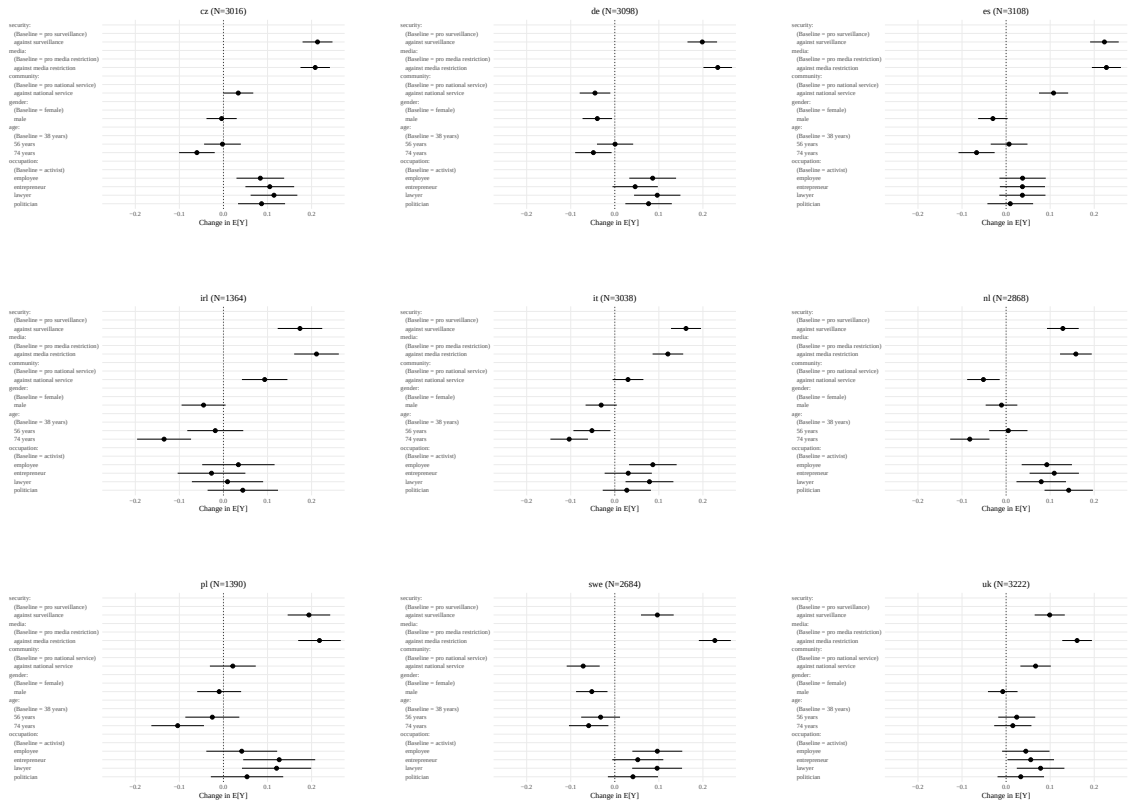


Figure C.7: AMCE for candidate choice after the first step of the experiment prior to party-reveal. Results by country. Bars indicate 95%-confidence intervals.

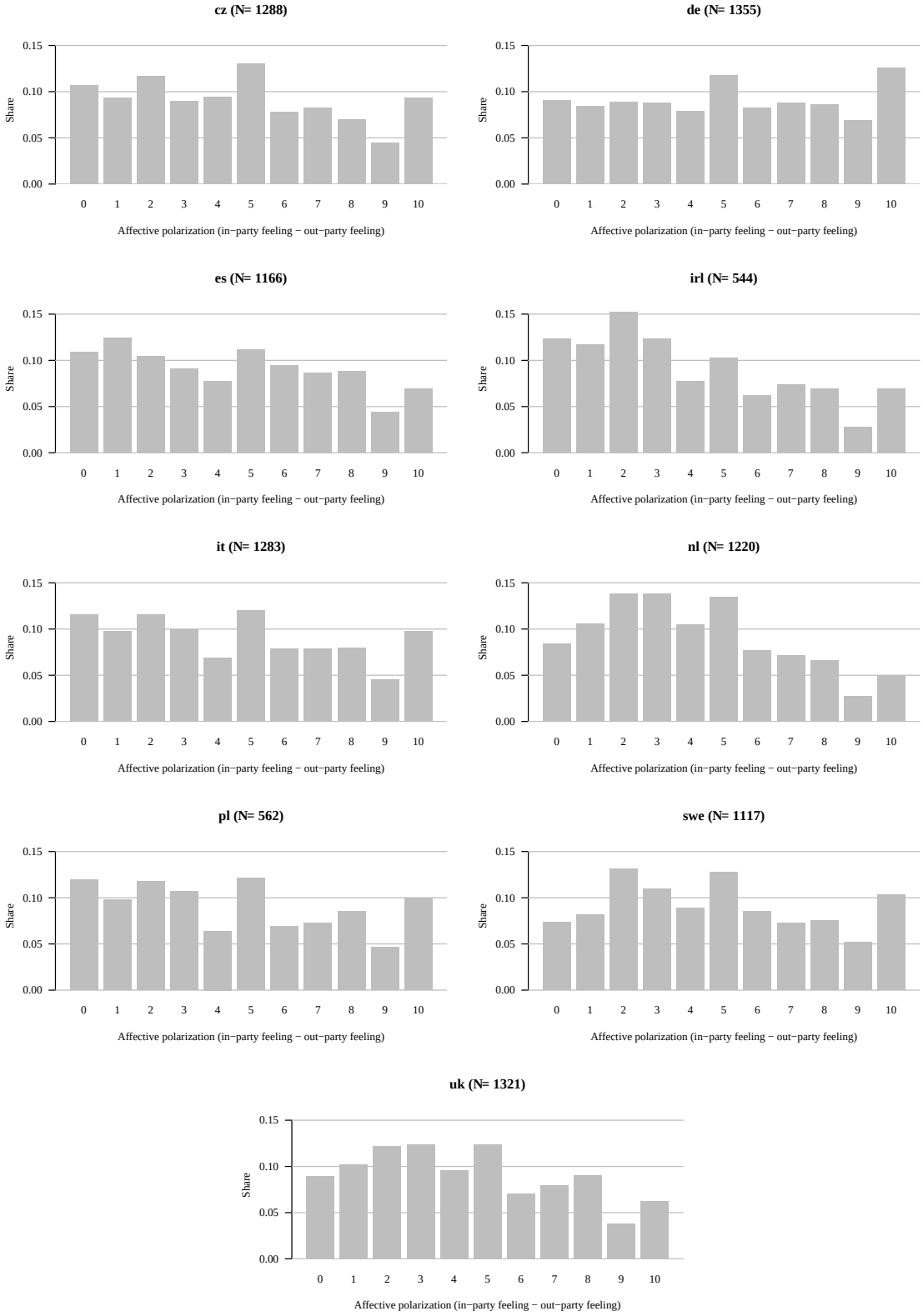


Figure C.8: Distribution of affective polarization for party-dyads in each country.

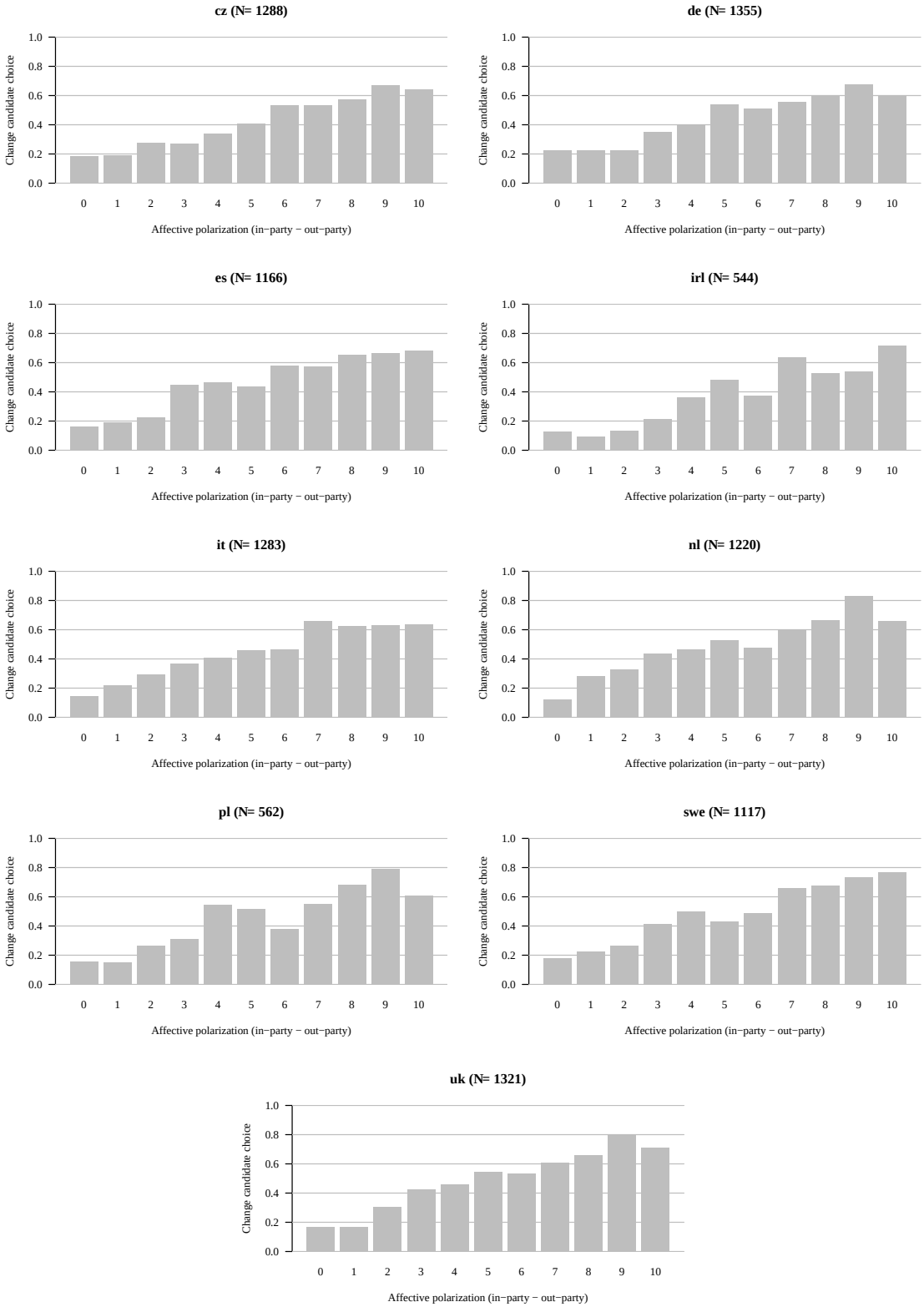


Figure C.9: Descriptive results of respondents changing their initial candidate choice dependent on their level of affective polarization in each country.

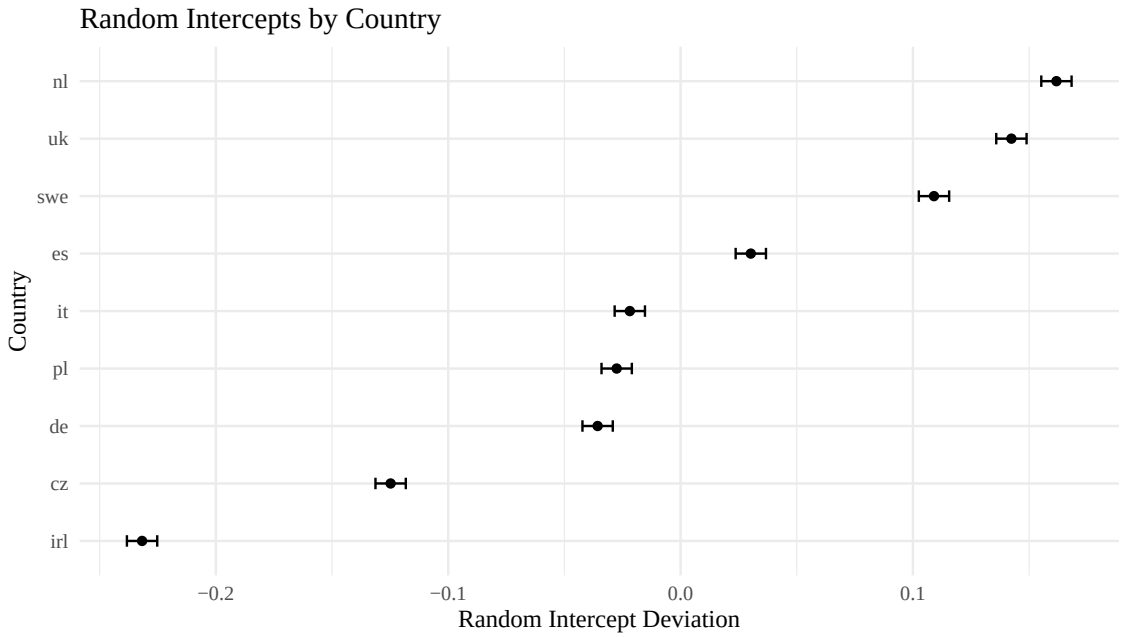
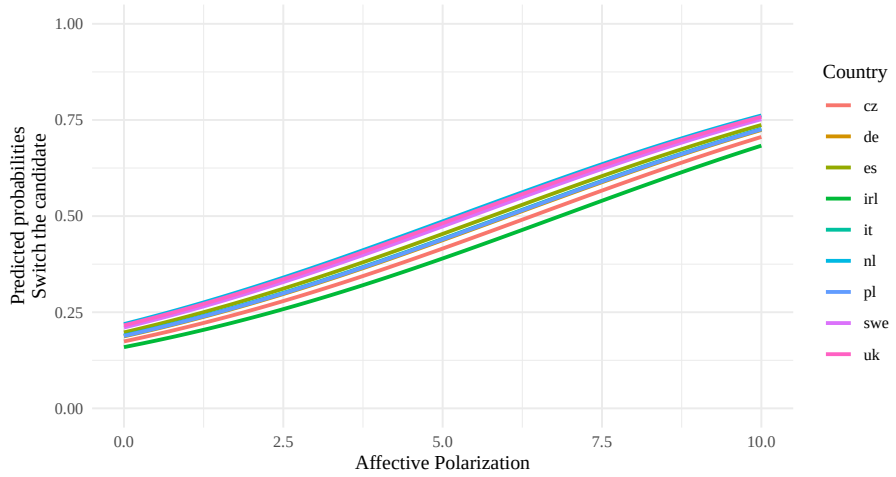
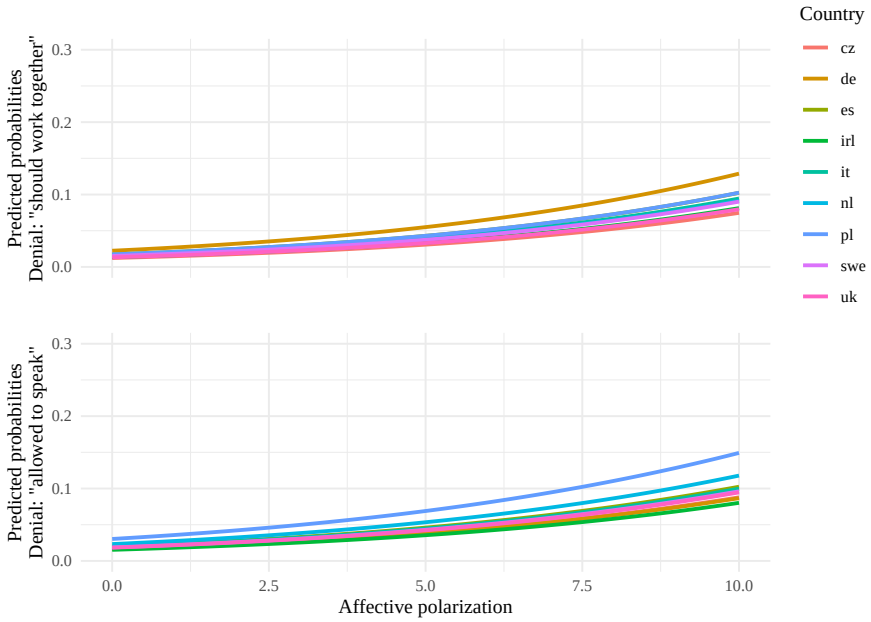


Figure C.10: Deviation of random intercept in main model.



(a) Predicted probabilities to change the candidate choice after the party affiliation of both candidates is revealed dependent on affective polarization.



(b) Predicted probabilities whether the first selected candidate, which is revealed as out-party candidate, should not work together with other candidates (upper panel) or should not be allowed to speak in public (lower panel) dependent on affective polarization between the dyad.

Figure C.11: Predicted probability from random intercept model showing the relationship between different dependent variables and affective polarization by country.

C.2.4 Robustness - step 1

Table C.7: Model comparison for main analysis of the switch-experiment. Comparison of different models: (1) plain logistic model, not accounting for country differences, (2) random-intercept model, (3) random-slopes model, (4) uncorrelated random slopes model. Anova test comparing model (2) and (3) validates that random slopes model does not yield a better fit.

	Dependent variable:			
	Change choice after party reveal			
	logistic	*generalized linear mixed-effects*		
	(1)	(2)	(3)	(4)
Affective polarization	0.242***	0.243***	0.245***	0.244***
	(0.008)	(0.008)	(0.010)	(0.009)
Constant	−1.406***	−1.432***	−1.440***	−1.433***
	(0.044)	(0.064)	(0.070)	(0.062)
Observations	8,848	8,848	8,848	8,848
Log Likelihood	−5,515.735	−5,507.498	−5,507.112	−5,507.237
Akaike Inf. Crit.	11,035.470	11,021.000	11,024.220	11,022.470
Bayesian Inf. Crit.		11,042.260	11,059.660	11,050.830

Note: *p<0.05; **p<0.01; ***p<0.001

Conjoint experiments are not free from measurement error. Following Clayton et al. (2023), a switch of rated profiles can provide insights onto its extend. After the whole experimental procedure, respondents were asked to rate the profile of two new politicians. In fact, these two politicians were the same as previously, but the profiles were switched. The comparison of estimates from the first experimental step with switched profiles (without party affiliation) is shown in Figure C.12. Based on the answers to the switched profiles, the measurement error is calculated and estimates can be corrected.

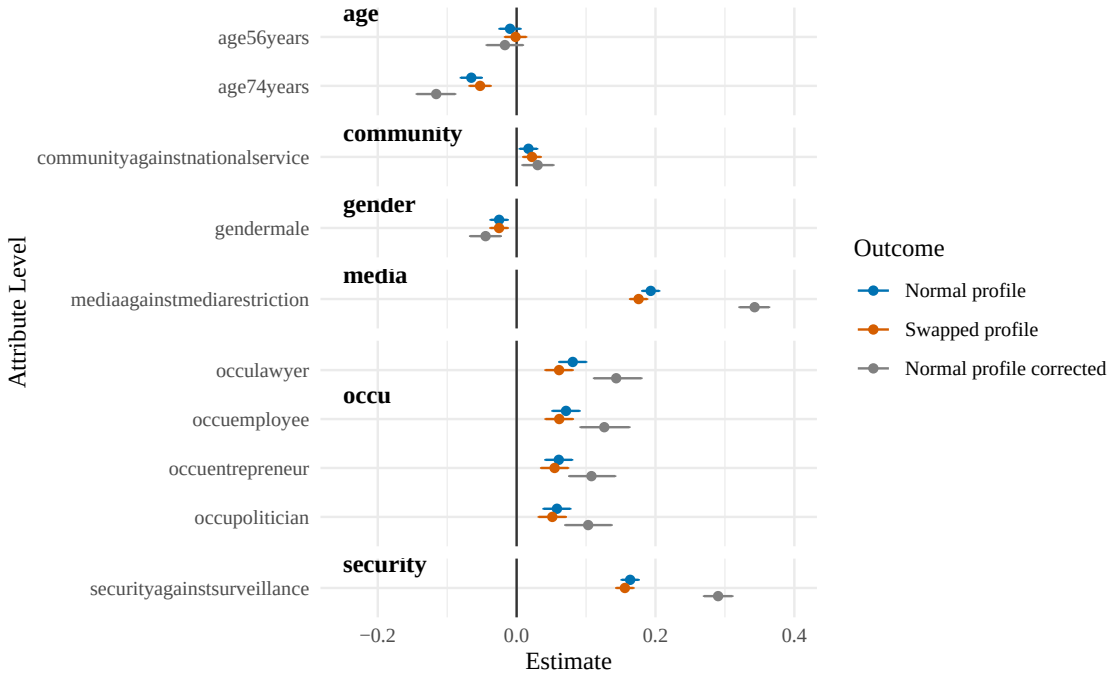


Figure C.12: First described model. AMCE for candidate choice after the first step of the experiment prior to party-reveal. The "Normal profile"-estimates indicates the results from the main analysis. The "Swapped profile"-estimates are based on the repeated measure with swapped profiles. This repeated measure is shown respondents after the whole experimental procedure. The measurement error is $\tau = 0.218$. The measurement error always leads to an underestimation of effect sizes. Accordingly, the corrected absolute values are always larger than the original estimates. Bars around corrected estimates indicate 95%-confidence intervals from bootstrapping.

C.2.5 Robustness - affective polarization

Table C.8: Main results from the switch-experiment with alternative DV formulation. Due to singularity issues because of smaller sample size, pooled models across all countries are used.

	Dependent variable:		
	Alternative DV after party reveal		
	(1)	(2)	(3)
Affective polarization	0.243***		0.262***
	(0.023)		(0.024)
Unequal security		−0.416**	−0.551***
		(0.132)	(0.143)
Unequal media		−0.258	−0.346*
		(0.132)	(0.142)
Unequal service		−0.291*	−0.285*
		(0.132)	(0.141)
Unequal gender		0.233	0.321*
		(0.132)	(0.142)
Unequal age		−0.262	−0.330*
		(0.139)	(0.149)
Unequal occupation		−0.334*	−0.439*
		(0.165)	(0.178)
Constant	−1.476***	0.456*	−0.549*
	(0.130)	(0.221)	(0.251)
Observations	988	988	988
Log Likelihood	−608.596	−654.664	−588.535
Akaike Inf. Crit.	1,221.191	1,323.329	1,193.071

Note: *p<0.05; **p<0.01; ***p<0.001

Table C.9: Main regression results from the switch-experiment with different subsamples. In model (1) & (2), random assigned party-dyads for which respondents are not polarized are excluded. In model (3) & (4), respondents who do not have a clear in-party (based on a single highest feeling thermometer score) are excluded. Multilevel models with random intercept for countries.

	Dependent variable:			
	Change choice after party reveal			
	w/o unpolarized dyad		w/o unclear in-party	
	(1)	(2)	(3)	(4)
Affective polarization	0.234***	0.242***	0.237***	0.245***
	(0.009)	(0.009)	(0.010)	(0.010)
Unequal security		−0.344***		−0.362***
		(0.048)		(0.053)
Unequal media		−0.464***		−0.475***
		(0.048)		(0.053)
Unequal service		−0.394***		−0.389***
		(0.048)		(0.053)
Unequal gender		−0.113*		−0.120*
		(0.048)		(0.053)
Unequal age		−0.058		−0.070
		(0.051)		(0.057)
Unequal occupation		0.006		0.011
		(0.060)		(0.066)
Constant	−1.374***	−0.727***	−1.410***	−0.745***
	(0.071)	(0.105)	(0.080)	(0.116)
Observations	7,980	7,980	6,602	6,602
Log Likelihood	−5,111.419	−5,001.752	−4,216.676	−4,121.515
Akaike Inf. Crit.	10,228.840	10,021.500	8,439.353	8,261.031
Bayesian Inf. Crit.	10,249.790	10,084.370	8,459.738	8,322.187

Note: *p<0.05; **p<0.01; ***p<0.001

Table C.10: Main regression results from the switch-experiment excluding cases that include any extreme parties (based on CHES party family classification) as in-party or out-party. Multilevel models with random intercept for countries.

	Dependent variable:	
	Change choice after party reveal w/o extreme parties	
	(1)	(2)
Affective polarization	0.245***	0.254***
	(0.012)	(0.012)
Unequal security		−0.387***
		(0.066)
Unequal media		−0.473***
		(0.066)
Unequal service		−0.429***
		(0.066)
Unequal gender		−0.058
		(0.066)
Unequal age		−0.101
		(0.070)
Unequal occupation		−0.045
		(0.082)
Constant	−1.491***	−0.756***
	(0.082)	(0.134)
Observations	4,483	4,483
Log Likelihood	−2,760.963	−2,696.741
Akaike Inf. Crit.	5,527.925	5,411.481
Bayesian Inf. Crit.	5,547.149	5,469.153
Note:	*p<0.05; **p<0.01; ***p<0.001	

Table C.11: Regression results from the switch-experiment without profiles in which all three (model 1)/both CL policies (model 2) were identical. Previously used variables indicating whether a policy position was equal or not are dropped, as profile pairs with equal positions are dropped. Multilevel models with random intercept for countries.

	Dependent variable:	
	Change choice after party reveal	
	All policies identical	Both CL identical
	(1)	(2)
Affective polarization	0.241***	0.243***
	(0.022)	(0.016)
Constant	−1.746***	−1.655***
	(0.136)	(0.101)
Observations	1,144	2,242
Log Likelihood	−681.766	−1,361.418
Akaike Inf. Crit.	1,369.532	2,728.835
Bayesian Inf. Crit.	1,384.659	2,745.981
Note:	*p<0.05; **p<0.01; ***p<0.001	

Table C.12: Regression results from the switch-experiment with different controls and subsample. In model (1), (2) & (3), respondents importance for security, civil liberties and the preference between the security and civil liberties are added as control variables. In model (4) & (5), only respondents who rated civil liberties as very important are kept in the sample. Multilevel models with random intercept for countries.

	Dependent variable:				
	Change choice after party reveal				
	with additional controls			only strongest CL pref.	
	(1)	(2)	(3)	(4)	(5)
Affective polarization	0.241***	0.244***	0.252***	0.220***	0.226***
	(0.008)	(0.008)	(0.008)	(0.011)	(0.011)
Unequal security			−0.337***		−0.432***
			(0.047)		(0.068)
Unequal media			−0.473***		−0.481***
			(0.047)		(0.068)
Unequal service			−0.392***		−0.402***
			(0.047)		(0.068)
Unequal gender			−0.092		0.018
			(0.047)		(0.068)
Unequal age			−0.072		−0.111
			(0.050)		(0.072)
Unequal occupation			−0.038		−0.045
			(0.059)		(0.084)
Importance civil liberties		−0.045**	−0.049**		
		(0.016)	(0.016)		
Importance security		−0.034	−0.030		
		(0.018)	(0.018)		
Trade-off: sec more imp.		0.011	0.008		
		(0.010)	(0.010)		
Constant	−1.423***	−0.756***	−0.078	−1.436***	−0.716***
	(0.065)	(0.174)	(0.193)	(0.079)	(0.132)
Observations	8,674	8,674	8,674	4,157	4,157
Log Likelihood	−5,407.29	−5,397.72	−5,282.42	−2,599.86	−2,534.49
Akaike Inf. Crit.	10,820.60	10,807.45	10,588.85	5,205.73	5,086.99
Bayesian Inf. Crit.	10,841.80	10,849.85	10,673.67	5,224.73	5,143.98

Note: *p<0.05; **p<0.01; ***p<0.001

Table C.13: Regression results from the switch-experiment with subgroup of respondents that did not indicate a party guess (stated 'don't know') for both candidates (model 1 & 2) and respondents who indicated a party guess for both parties (model 3 & 4). The share of respondents who did indicate no party guess for both parties varies between 10% and 15% of respondents per country. The table shows multilevel models with random intercept for countries.

	Dependent variable:			
	Change choice after party reveal			
	No party guess		Guess for both	
	(1)	(2)	(3)	(4)
Affective polarization	0.308***	0.321***	0.233***	0.240***
	(0.024)	(0.024)	(0.009)	(0.010)
Unequal security		−0.272*		−0.300***
		(0.138)		(0.055)
Unequal media		−0.680***		−0.439***
		(0.139)		(0.055)
Unequal service		−0.409**		−0.356***
		(0.138)		(0.055)
Unequal gender		−0.168		−0.082
		(0.138)		(0.055)
Unequal age		−0.148		−0.090
		(0.146)		(0.059)
Unequal occupation		−0.224		−0.015
		(0.163)		(0.069)
Constant	−1.532***	−0.591*	−1.411***	−0.784***
	(0.125)	(0.232)	(0.075)	(0.115)
Observations	1,108	1,108	6,166	6,166
Log Likelihood	−653.882	−631.915	−3,878.239	−3,809.392
Akaike Inf. Crit.	1,313.765	1,281.829	7,762.478	7,636.784
Bayesian Inf. Crit.	1,328.796	1,326.922	7,782.658	7,697.325

Note: *p<0.05; **p<0.01; ***p<0.001

Table C.14: Results from the switch-experiment comparing independent out-party/selected candidate vs. candidate with party affiliation. Multilevel models with random intercept for countries.

	Dependent variable:	
	Change choice after party reveal	
	(1)	(2)
Out-Party: Not independent	0.748***	0.760***
	(0.059)	(0.059)
Unequal security		−0.282***
		(0.040)
Unequal media		−0.403***
		(0.040)
Unequal service		−0.329***
		(0.040)
Unequal gender		−0.068
		(0.040)
Unequal age		−0.084*
		(0.043)
Unequal occupation		−0.021
		(0.050)
Constant	−1.051***	−0.456***
	(0.072)	(0.098)
Observations	10,670	10,670
Log Likelihood	−7,092.657	−6,981.183
Akaike Inf. Crit.	14,191.310	13,980.370
Bayesian Inf. Crit.	14,213.140	14,045.840
Note:	*p<0.05; **p<0.01; ***p<0.001	

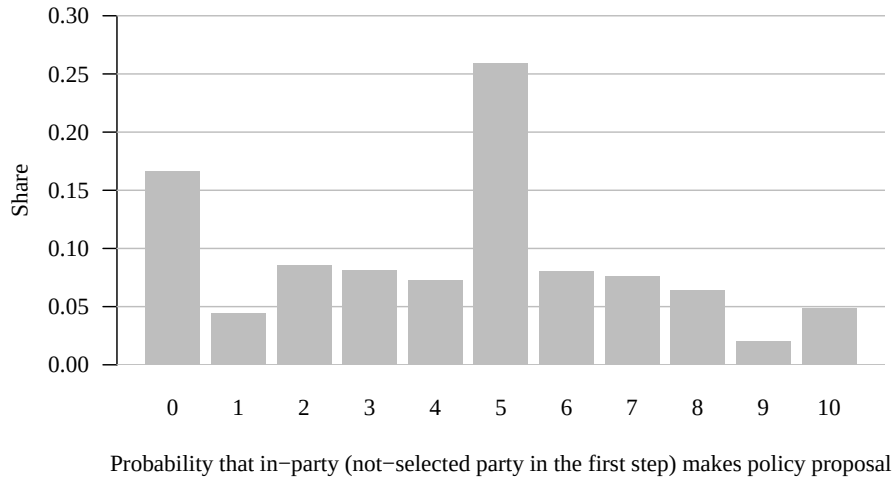


Figure C.13: Credibility of the in-party's proposal. In the second step of the experiment, after the measurement of the three dependent variables, respondents were asked to take another look at the policy proposal of the not selected candidate in the first step (revealed as in-party candidate in second step). Then they were asked how likely they think it is that a politician from the shown party will make such a policy proposal (0 - very unlikely, 5 - neither likely nor unlikely, 10 - very likely).

Table C.15: Regression results from the switch-experiment including the post-treatment measure how likely respondents consider the policy proposal by the initially not chosen candidate. This candidate is later assigned with the in-party of the respondent. Multilevel models with random intercept for countries.

	Dependent variable:			
	Change choice after party reveal			
	(1)	(2)	(3)	(4)
Affective polarization	0.243***		0.259***	0.266***
	(0.008)		(0.008)	(0.009)
Likelihood of proposal		0.086***	0.122***	0.117***
		(0.008)	(0.009)	(0.009)
Unequal security				−0.337***
				(0.048)
Unequal media				−0.432***
				(0.048)
Unequal service				−0.391***
				(0.048)
Unequal gender				−0.098*
				(0.048)
Unequal age				−0.061
				(0.051)
Unequal occupation				−0.032
				(0.060)
Constant	−1.434***	−0.657***	−2.032***	−1.354***
	(0.062)	(0.056)	(0.076)	(0.108)
Observations	8,490	8,490	8,490	8,490
Log Likelihood	−5,294.771	−5,742.708	−5,190.824	−5,088.159
Akaike Inf. Crit.	10,595.540	11,491.420	10,389.650	10,196.320
Bayesian Inf. Crit.	10,616.680	11,512.560	10,417.830	10,266.780

Note: *p<0.05; **p<0.01; ***p<0.001

C.2.6 The case of extreme parties

Table C.16: Regression results from the switch-experiment. Comparison of probability to switch away from an extreme out-party to moderate in-party vs. switching from a moderate out-party to an extreme in-party. The candidate with the out-party was chosen by the respondent in the first step of the experiment based on their policy positions and demographic attributes. Multilevel models with random intercept for countries.

	Dependent variable:			
	Change choice after party reveal			
	Mod Out & Ext In		Ext Out & Mod In	
	(1)	(2)	(3)	(4)
Affective polarization	0.197***	0.204***	0.297***	0.308***
	(0.015)	(0.015)	(0.018)	(0.019)
Unequal security		−0.223*		−0.313**
		(0.091)		(0.108)
Unequal media		−0.396***		−0.588***
		(0.091)		(0.108)
Unequal service		−0.328***		−0.390***
		(0.091)		(0.108)
Unequal gender		−0.164		−0.152
		(0.091)		(0.108)
Unequal age		−0.084		0.060
		(0.097)		(0.116)
Unequal occupation		0.059		−0.037
		(0.113)		(0.136)
Constant	−1.223***	−0.698***	−1.449***	−0.812***
	(0.099)	(0.170)	(0.107)	(0.199)
Observations	2,200	2,200	1,739	1,739
Log Likelihood	−1,417.229	−1,395.913	−1,044.892	−1,016.553
Akaike Inf. Crit.	2,840.458	2,809.827	2,095.783	2,051.107
Bayesian Inf. Crit.	2,857.547	2,861.093	2,112.167	2,100.256

Note: *p<0.05; **p<0.01; ***p<0.001

C.2.7 Mediation regression tables

	Baseline	With controls
AME	-0.073*** [-0.083, -0.064]	-0.076*** [-0.086, -0.066]
ADE	-0.034* [-0.062, -0.007]	-0.034* [-0.065, -0.001]
Total Effect	-0.108*** [-0.136, -0.08]	-0.11*** [-0.14, -0.08]
Prop. Mediated	0.677*** [0.536, 0.913]	0.694*** [0.531, 0.981]

Table C.17: Bootstrapping analysis for mediation model with coalition status. Effects of affective polarization mediating the relationship between coalition status and switching away from the initially selected candidate. Mediation Model with controls includes variables for gender, age, education, left-right self-assessment.

	Baseline	With controls
AME	0.057*** [0.046, 0.067]	0.057*** [0.046, 0.067]
ADE	0.059*** [0.033, 0.087]	0.061*** [0.033, 0.09]
Total Effect	0.116*** [0.088, 0.146]	0.117*** [0.087, 0.148]
Prop. Mediated	0.489*** [0.381, 0.638]	0.482*** [0.376, 0.648]

Table C.18: Bootstrapping analysis for mediation with out-party belonging to the radical party family. Effects of affective polarization mediating the relationship between the out-party being radical and switching away from the initially selected candidate. Party belonging to a radical family (CHES party family classification being ”Radical Right (RADRT)” or ”Radical Left (RADLEFT)”). Model with controls includes variables for gender, age, education, left-right self-assessment.

	Baseline	With controls
AME	0.039*** [0.029, 0.049]	0.039*** [0.028, 0.048]
ADE	0.055*** [0.03, 0.082]	0.062*** [0.035, 0.091]
Total Effect	0.094*** [0.066, 0.123]	0.101*** [0.071, 0.131]
Prop. Mediated	0.414*** [0.305, 0.576]	0.383*** [0.285, 0.542]

Table C.19: Bootstrapping analysis for mediation with out-party being extreme on the left-right scale. Effects of affective polarization mediating the relationship between the out-party being extreme and switching away from the initially selected candidate. A party being radical on the left-right scale (extreme left (< 2) or extreme right (> 8)). Model with controls includes variables for gender, age, education, left-right self-assessment.

	Baseline	With controls
AME	0.004 [-0.006, 0.013]	0.003 [-0.008, 0.013]
ADE	0.025. [0, 0.052]	0.033. [0.005, 0.061]
Total Effect	0.029* [0.001, 0.059]	0.036* [0.006, 0.066]
Prop. Mediated	0.131 [-0.641, 0.913]	0.086 [-0.355, 0.473]

Table C.20: Bootstrapping analysis for mediation with out-party being extreme on the GAL-TAN scale. Effects of affective polarization mediating the relationship between the out-party being extreme and switching away from the initially selected candidate. A party being radical on the GAL-TAN scale (strongly libertarian/postmaterialist (< 2) or strongly traditional/authoritarian (> 8)). Model with controls includes variables for gender, age, education, left-right self-assessment.

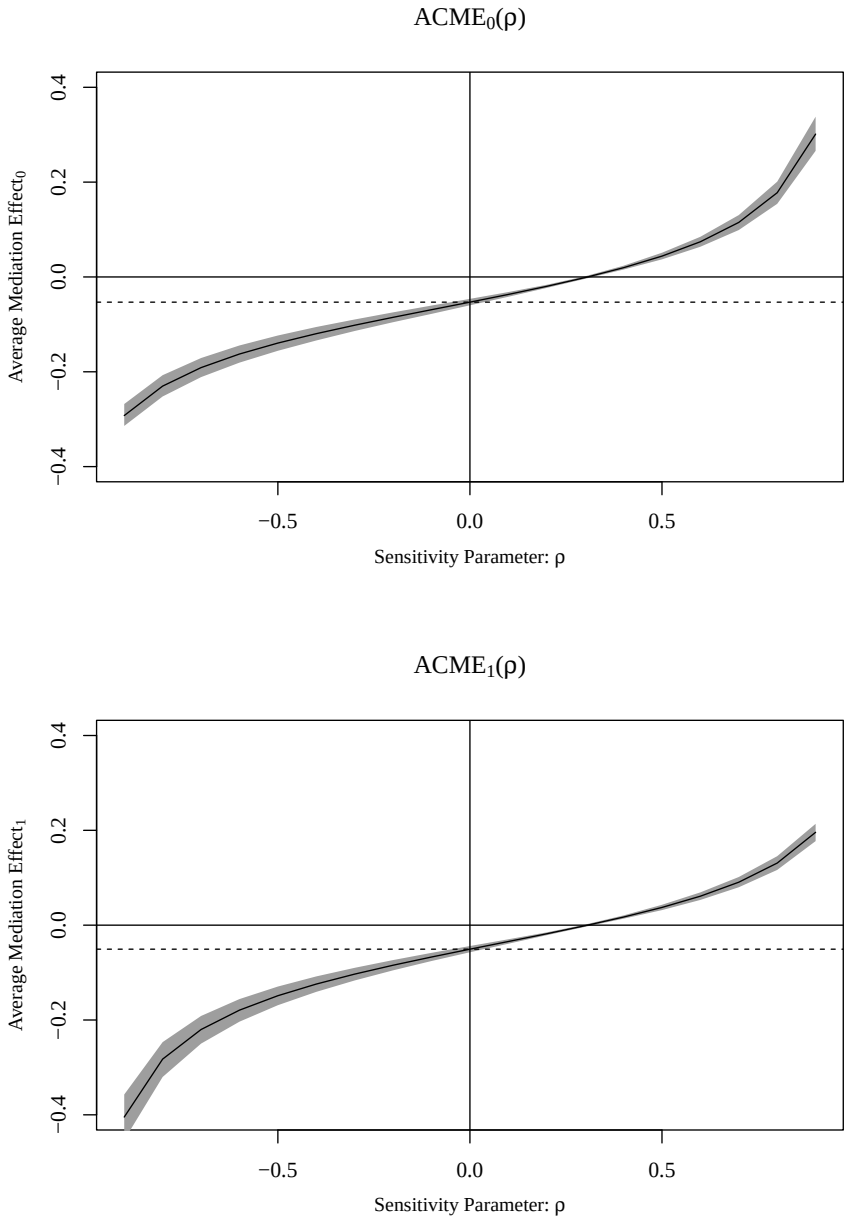


Figure C.14: Sensitivity analysis for the mediation of coalition status through affective polarization on switching away from the candidate with preferred policy positions. The underlying models are simplified in comparison to the main analyze and do not contain the hierarchical structure due to software limitations. The dotted horizontal bar indicates the estimated effect size of the AME for both values dependent on the coalition status $(0/1)$. The solid line with 95% confidence interval indicates how the effect size changes along of different values of the sensitivity parameter ρ. The effect becomes zero when ρ is 0.3.

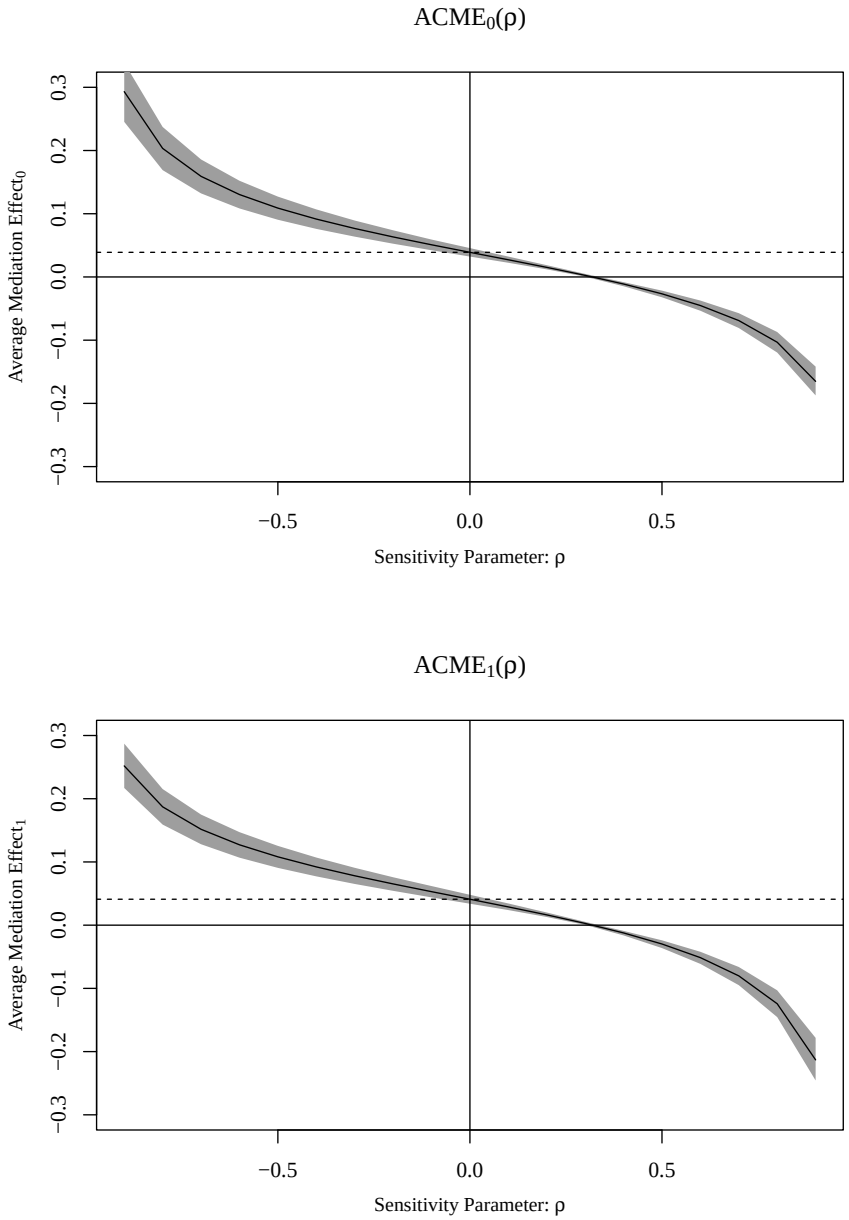


Figure C.15: Sensitivity analysis for the mediation of extreme out-party affiliation of the first selected, out-party candidate through affective polarization on switching away from that candidate. The underlying models are simplified and do not contain the hierarchical structure due to software limitations. The dotted horizontal bar indicates the estimated effect size of the AME for both values dependent on the coalition status $(0/1)$. The solid line with 95% confidence interval indicates how the effect size changes along of different values of the sensitivity parameter ρ. The effect becomes zero when ρ is 0.3.