

The Fear of Injustice

How Victim Sensitivity Affects Political Attitudes and Behaviour



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1. Abstract

Victim sensitivity – the dispositional sensitivity to self-related injustice – has been associated with a preference for right-wing political actors, anti-immigration attitudes, and a tendency to refrain from pro-environmental behaviour. This dissertation draws on theoretical assumptions and prior research to examine the psychological processes that explain the association of victim sensitivity with political attitudes and behaviour. Three manuscripts, including eight empirical studies, provide insights into the link between the sensitivity to perceiving oneself as a victim of moral transgressions and a right-wing political orientation, and into the motivational and social-cognitive processes that explain the antisocial tendencies of victim-sensitive individuals in the contexts of immigration and climate action. I discuss theoretical and practical insights, methodological limitations as well as avenues for future research.

Keywords: Victim sensitivity, justice sensitivity, political orientation, anti-immigration attitudes, climate action

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3. Statement of Authorship

This dissertation consists of an introduction, three manuscripts that have been submitted to peer-reviewed journals (see below), and a final discussion. I hereby declare that the present dissertation is my own work, and that I independently developed the methodological designs, pre-registered the empirical studies as well as analysed and interpreted the data derived from the studies reported in this dissertation. Study 1 in Manuscript 2 and Study 1 in Manuscript 3 were based on existing datasets (used by permission of the authors; more details in the respective manuscripts). For Manuscript 1, I received feedback from my co-authors Ulf Steinberg, Maxim Egorov, Claudia Peus, and Mario Gollwitzer. For Manuscript 2, I received feedback from my co-author Mario Gollwitzer. For Manuscript 3, my co-author Konstantin Strieder collected data for Study 2, and I received feedback from my co-authors Marlene Altenmüller and Mario Gollwitzer.

Manuscript 1

Köhler, L. J. E., Steinberg, U., Egorov, M., Peus, C., & Gollwitzer, M. (under review). Let's put this into perspective: Combining moral foundations and justice sensitivity perspectives to understand political orientation. *Social Psychology*.

Manuscript 2

Köhler, L. J. E., & Gollwitzer, M. (2024). How victim sensitivity affects our attitudes and behaviour towards immigrants. *British Journal of Psychology*, 00, 1–31.
<https://doi.org/10.1111/bjop.12695>.

Manuscript 3

Köhler, L. J. E., Strieder, K. L., Altenmüller, M. S., & Gollwitzer, M. (2024). Why should I? How victim sensitivity affects pro-environmental engagement. *Journal of Environmental Psychology*, 102276. <https://doi.org/10.1016/j.jenvp.2024.102276>.

4. Introduction and Theoretical Background

4.1 Politics and Morality

“If we think of social life as a game, political behaviour aims to negotiate the rules of that game” (Lasswell, 1950). Conceptualizations of these rules – ideas about “morality” and “justice” – are ubiquitous in our society. Politicians argue about the “right” course of action, constitutions encompass a multitude of justice principles, and citizens vote for political parties that paint different pictures of a “just” society. People care about the rules of the game, and when they perceive that the rules have been broken, they are motivated to do something about it. We can observe this around the world: Angry citizens protesting against Germany’s immigration policies, a violent mob storming the US capitol after the presidential election, yellow vests rebelling against austerity measures in France, and environmental movements fighting for “climate justice” in various countries are but a few examples.

A large and growing body of research has investigated when, how, and why people perceive violations of moral norms and how these perceptions translate into political attitudes and behaviour. For instance, according to Moral Foundations Theory (MFT), people make moral judgments based on a set of distinct moral concerns or “foundations”¹ for which they harbour innate intuitions, including *care*, a concern for protecting the vulnerable from harm; *fairness*, a concern for justice and fairness in social exchanges; *loyalty*, a concern for loyalty towards one’s in-group; *authority*, a concern for authority and hierarchy in social structures; and *sanctity*, a concern for meta-physical standards such as purity (Graham et al., 2013; Haidt, 2012). Research suggests that individual differences in concerns for moral foundations can explain political disparities between “liberals” and “conservatives.”² For instance, studies

¹ While the authors of Moral Foundations Theory originally proposed five moral foundations, research has since identified additional moral foundations (e.g., "Liberty" and "Honour"; Atari et al., 2020; Iyer et al., 2012).

² In this context, the terms “liberal” and “conservative” are used to describe a left-wing political orientation and a right-wing political orientation respectively.

indicate that liberals harbour positive attitudes towards immigrants as they judge immigration predominantly on the fairness foundation, which emphasizes concerns for equality and non-discrimination (Hadarics & Kende, 2018). Conservatives, on the other hand, tend to show antisocial tendencies towards immigrants as they endorse the loyalty foundation, which emphasizes norms and traditions of the in-group that need to be protected from outsiders (Baldner & Pierro, 2019; Hadarics & Kende, 2018). In the environmental context, studies in Western countries suggest that liberals engage in pro-environmental behaviour as they regard climate change as a matter of global justice. In contrast, conservatives are less inclined to adapt their behaviour for environmental purposes, as they are motivated to maintain the in-group's rights and freedoms (Jansson & Dorrepaal, 2015; Vainio & Mäkinen, 2016).

While ample research suggests that moral foundations are systematically related to political attitudes and behaviour (Di Battista et al., 2018; Nilsson et al., 2016; Nilsson & Erlandsson, 2015; Yalçındağ et al., 2019), recent findings indicate that we need to consider *perspectives* when examining the link between moral judgments and political thought and action (e.g., Rothmund et al., 2020). Specifically, research on justice sensitivity (JS; Schmitt et al., 2005, 2010) proposes that people's sensitivity to moral norm violations depends on the perspective from which the violation is perceived. According to this approach, people differ in their dispositional sensitivity to perceiving issues, such as immigration or climate change, as matters of injustice affecting oneself or affecting others. Recently, it was found that this perspective-specific sensitivity to moral violations is related to political attitudes and behaviour. For instance, studies showed that people who are particularly sensitive to perceiving others as victims of injustices prefer left-wing political actors, show favourable attitudes towards immigrants, and engage in pro-environmental behaviour (Nicolai et al., 2022; Rothmund et al., 2020; Süßenbach & Gollwitzer, 2015). Conversely, people who are particularly sensitive to perceiving themselves as victims of injustice (i.e., people high in

victim sensitivity) favour right-wing political actors, show anti-social tendencies towards immigrants, and are reluctant to engage in pro-environmental behaviour (Nicolai et al., 2022; Rothmund et al., 2020; Süßenbach & Gollwitzer, 2015). The central objective of this dissertation is to investigate the links between victim sensitivity and political attitudes and behaviour as well as motivational and social-cognitive processes that explain these links.

4.2 Justice Sensitivity

Justice is considered a fundamental human motive. People are generally motivated to strive for justice and to avoid injustice (Lerner, 1975, 1977). However, like other human motives, the strength of the justice motive varies between individuals. A psychological construct that is supposed to reflect interindividual differences in the strength of the justice motive is justice sensitivity (JS; Schmitt et al., 2005, 2010). Justice sensitivity captures people's general readiness to detect injustice as well as people's emotional and behavioural reactivity towards perceived violations of justice norms. Justice-sensitive individuals are especially attuned to environmental cues that allude to possible injustice, which is why they experience violations of justice norms more frequently than individuals who are less justice-sensitive (Schmitt, 1996). People with a high sensitivity for injustice show stronger emotional reactions towards perceived injustice and experience more intrusive thoughts about the episode of injustice than justice-*ins*sensitive individuals (Schmitt et al., 1995). When perceiving a justice norm violation, justice-sensitive people are particularly motivated to redress the injustice, for instance by means of retributive or punitive acts (Lotz et al., 2011).

Importantly, moral norm violations can be viewed from different perspectives and research shows that people's perception of and reactions towards violations differ depending on the perspective from which the event is viewed (Mikula, 1994; Mummendey et al., 1984). For instance, whereas perceiving that one has fallen victim to injustice typically elicits a feeling of anger, observing an episode of injustice as a bystander may trigger moral outrage,

and being responsible for or benefitting from injustice can lead to feelings of guilt and shame (Weiss et al., 1999). Based on these qualitative differences, it was suggested that people should differ in their propensity to detect and react to injustice to one's own disadvantage (*victim sensitivity*), to injustice that one is responsible for (*perpetrator sensitivity*), that one passively benefits from (*beneficiary sensitivity*), or that one witnesses as a neutral observer (*observer sensitivity*) (Schmitt et al., 2005).

The Justice Sensitivity Inventory was developed to capture people's emotional, cognitive and motivational reactions to perceiving injustice from these four perspectives (Schmitt et al., 2010). The instrument has proven to reliably and validly capture four dimensions, and the perspective-specific types of justice sensitivity have shown to be relatively stable across time and contexts, thereby providing evidence for the argument that they represent personality traits (Baumert et al., 2014; Schmitt et al., 2005, 2010). The justice sensitivity facets are positively inter-correlated³, which indicates that they share an underlying concern for justice. The specific correlational patterns between the facets do, however, reflect conceptual differences. For instance, the perspectives observer-, beneficiary-, and perpetrator sensitivity were found to be highly correlated, which reflects the notion that they focus on injustice that affects others, and not oneself. The three other-oriented JS facets show lower correlations with the victim sensitivity facet, which is in line with the idea that the latter reflects a self-oriented concern for justice (Gollwitzer et al., 2005).

Empirical investigations on the relationship between justice sensitivity and other personality facets provide insights into the psychological distinctions of the JS perspectives. Specifically, it has been shown that the other-oriented JS facets, observer-, beneficiary-, and perpetrator sensitivity are associated with prosocial and other-related cognitions, such as

³ Despite considerable correlations between the perspective-specific dimensions, they cannot be reduced to fewer dimensions without a significant loss of information (Schmitt et al., 2010).

solidarity, empathy, modesty, and social responsibility. Victim sensitivity (VS), on the other hand, is related to antisocial and self-related concerns, including jealousy, suspiciousness, neuroticism, hostility, paranoia, and vengeance (Schmitt et al., 2005, 2010). Looking at behavioural tendencies, studies have consistently shown that the other-oriented JS facets are associated with prosocial behaviours, including solidarity with the disadvantaged and equal split offers in economic games. Conversely, VS is associated with anti-social behavioural tendencies, including egoistic choices in social dilemmas and delinquent behaviours, such as shoplifting, insurance fraud and tax evasion (Gollwitzer et al., 2005).

4.3 Victim Sensitivity and the Sensitivity to Mean Intentions Model

Given that justice sensitivity was introduced as a personality construct that reflects interindividual differences in the strength of the justice motive, it seems contradictory that a facet of this construct is related to uncooperative and unfair behaviour towards others. Research suggests that VS includes both a principled concern for justice on the one hand, and a heightened aversion towards being treated unjustly on the other. This results in antisocial tendencies in situations that involve social uncertainty and a threat of being exploited (Gollwitzer et al., 2005). The Sensitivity to Mean Intentions Model (SeMI Model; Gollwitzer et al., 2013; Gollwitzer & Rothmund, 2009) elaborates on the motivational and social-cognitive processes inherent to victim sensitivity (Figure 1).

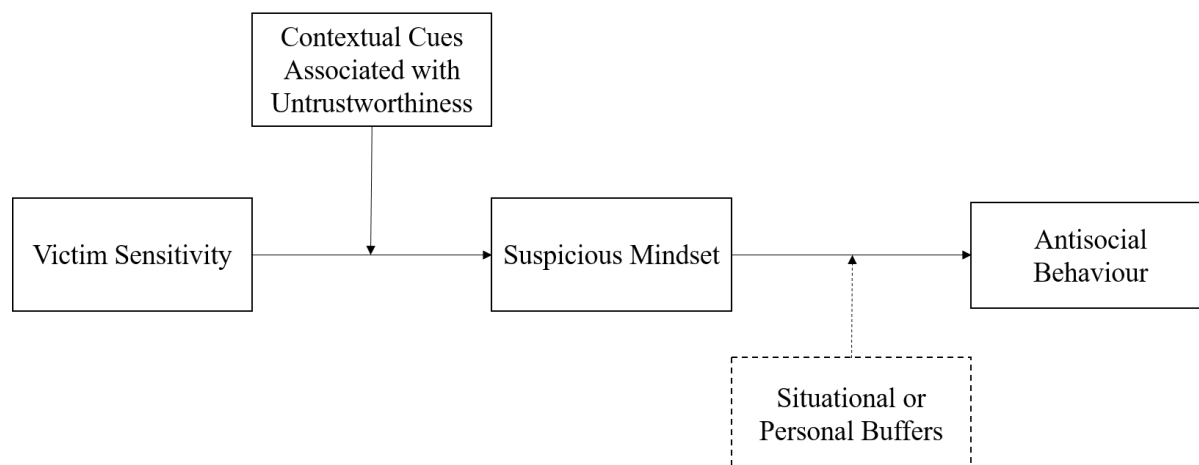


Figure 1. The Sensitivity to Mean Intentions Model adapted from Gollwitzer et al., 2013.

According to the SeMI model, victim-sensitive individuals harbour a latent fear of being exploited, which is why they are more attuned to cues suggesting potential untrustworthiness than to cues indicating trustworthiness ("asymmetry hypothesis"; Gollwitzer et al., 2013). In support of this hypothesis, a study found that people high in VS rated neutral and hostile faces as more untrustworthy than people low in VS, and victim-sensitive individuals systematically underestimated targets' cooperativeness (Gollwitzer et al., 2012). In addition, victim-sensitive people are less inclined to cooperate in social exchange situations, such as social dilemmas, when untrustworthiness cues are present ("defection hypothesis"; Gollwitzer et al., 2013). People high in VS view cooperation and investments into the public good as a waste of own resources as they expect that others will not cooperate, and thus, contributing to the public good would be an unnecessary subsidy for "free riders." This hypothesis was tested empirically, and it was shown that, in the face of slight untrustworthiness cues, victim-sensitive individuals are less willing to contribute their resources in a public goods dilemma, in which contributing to the public good maximizes joint outcomes and not contributing only maximizes one's individual profit (Gollwitzer et al., 2009).

Victim-sensitive individuals adopt a suspicious mindset following the appraisal of untrustworthiness cues (“suspicious mindset hypothesis”; Gollwitzer et al., 2013). The suspicious mindset represents a social-cognitive scheme that affects how victim-sensitive people think, feel, and act in socially uncertain situations (Gollwitzer et al., 2013). The first component of this scheme is a *hostile attribution bias*, which describes the tendency of people high in VS to infer malicious intentions. The second component is an *avoidance-related motivational state*, describing that victim-sensitive individuals dread being taken advantage of, which is why they show avoidant behavioural tendencies in social situations. The third component of the suspicious mindset is the *availability of legitimizing or rationalizing cognitions*, which describes that people high in VS legitimize their own moral norm violations (e.g., by arguing that cooperation is useless or illogical) to avoid negative (self-) evaluation. Studies have provided empirical support for some of these assumptions, showing for instance that the relationship between VS and unforgiving reactions in social situations was partially mediated by hostile interpretations and legitimizing cognitions (Gerlach et al., 2012). Finally, the SeMI model predicts that the suspicious mindset does not necessarily result in self-protective and antisocial behaviour. Situational and personal “buffers,” such as social norms and self-regulation capacities may mitigate the effects of a suspicious mindset on antisocial behaviour (Gollwitzer et al., 2013; Gollwitzer & Rothmund, 2009). In support of this, recent empirical findings indicate that a sense of control can attenuate the effect of VS on defensive reactions in interpersonal situations (Buchholz et al., 2023).

4.4 Victim Sensitivity in the Political Arena

Researchers have begun to examine the association of VS with political orientation, attitudes and behaviour. Studies indicate that victim-sensitive individuals tend to favour a conservative political orientation and right-wing political actors (Jahnke et al., 2020; Rothmund et al., 2020). A conservative political orientation in Western countries typically

emphasizes the safety and well-being of the in-group, which is influenced by an underlying fear of social dangers (Graham et al., 2009; van Leeuwen & Park, 2009). As people high in VS are specifically wary of social uncertainty and threatening cues, a security-oriented political orientation is conducive to their concerns. Supporting this idea, research found that the positive relationship between VS and a preference for right-wing political actors was partly mediated by a concern for social order (i.e., "right-wing authoritarianism"; Rothmund et al., 2020).

In line with the SeMI model, victim-sensitive individuals have shown to be vigilant towards cues of untrustworthiness in various political settings, subsequently motivating antisocial sentiments and attitudes towards other groups. For instance, in the context of the European debt crisis⁴, people high in VS showed less solidarity with economically strapped countries than people low in VS. The relationship between VS and decreased solidarity was mediated by nationalistic concerns and resentment towards the debtor countries. In a subsequent study, it was shown that news media communications, which framed the support for needy countries in a way that suggested exploitative intentions of the debtor countries, were more likely to elicit nationalistic concerns and consequently decrease solidarity among victim-sensitive individuals than communications, which framed the support in terms of solidarity (Rothmund et al., 2017). A study on immigration indicates that the effect of VS on anger towards asylum-seekers depends upon perceived exploitation. Specifically, German citizens high in VS (compared to citizens low in VS) reported more anger towards asylum-seekers when a newspaper article suggested that the asylum-seekers' main aim was to receive

⁴ The "European debt crisis" (2009 – 2014) was a financial crisis in the European Union, during which several member states were unable to repay or refinance their government debt or bail out over-indebted banks without the assistance of other member states, the European Central Bank or the International Monetary Fund.

financial support compared to a narrative frame that emphasized that the asylum-seekers' need for protection (Süssenbach & Gollwitzer, 2015, Study 2).

In the context of societal crises or change, victim-sensitive individuals also seem to be guided by a vigilance towards cues suggesting possible disadvantages, motivating them to engage in self-protective measures. For instance, when health care practitioners high in VS were asked to reflect about personal challenges posed by a health care reform, they were more inclined to proactively resist against this reform than less victim-sensitive practitioners (Traut-Mattausch et al., 2011, Study 1). This effect was replicated in the context of an educational reform looking at resistance behaviour of students who were asked to reflect about how the increase of tuition fees would affect them personally (Traut-Mattausch et al., 2011, Study 2). Building on these findings, a study found that the effect of VS on resistance to a political reform was driven by a tendency to attribute ulterior motives to policy makers (Agroskin et al., 2015). This attributional bias depended on the presence of untrustworthiness cues. If there was no reason to distrust, suspiciousness was not evoked, and the relationship between VS and resistance to the reform disappeared. Some empirical evidence suggests that victim-sensitive individuals refrain from political engagement when the behavioural investment in itself might lead to being exploited. For instance, a study examining protest intentions against a controversial railway and urban development project in a German city, it was found that VS negatively predicted political protest (Rothmund et al., 2014). This was explained by the idea that victim-sensitive people are less motivated to engage in activities that promote the benefit of the general public as they fear that others might exploit their efforts. In support of this, VS was associated with moral disengagement regarding climate change consequences, which, in turn, negatively predicted past pro-environmental behaviour and the intention to engage in pro-environmental behaviour in the future (Nicolai et al., 2022).

4.5 Desiderata

In sum, research suggests that victim sensitivity is related to political orientation, attitudes, and behaviour, and studies in the field have begun to examine these links by testing theoretical assumptions derived from the SeMI model (Gollwitzer et al., 2013). The reviewed empirical findings highlight avenues for research, which I address in this dissertation.

First, the association of VS with political conservatism and antisocial attitudes has been linked to the self-oriented concern for justice inherent to the VS construct (Rothmund et al., 2020). However, we know that people harbour concerns for a variety of moral norms, which are systematically related to political orientation and attitudes (Di Battista et al., 2018; Graham et al., 2009). Thus, to examine whether and how a sensitivity to perceiving oneself as a victim of moral transgressions is related to political orientation and antisocial attitudes, one should consider the diversity of people's moral concerns, including concerns for fairness, care, authority, loyalty and sanctity (Graham et al., 2009). Second, research has begun to examine the relationship between VS and intergroup attitudes (Rothmund et al., 2017, 2020). While first findings indicate that victim-sensitive individuals show antisocial tendencies towards potentially exploitative out-groups (Rothmund et al., 2017; Süßenbach & Gollwitzer, 2015), the field lacks empirical insights into the causal nature of and the underlying psychological mechanisms explaining the relationship between VS antisocial attitudes as well as possible downstream consequences on antisocial behaviour. Third, research examining the relationship between VS and collective action is scarce. Findings indicate that VS can either impede or foster collective political engagement (Rothmund et al., 2014; Traut-Mattausch et al., 2011); however, theoretical explanations for these findings have not been tested empirically.

4.6 The Present Research Program

The current dissertation was designed to address the above-mentioned research gaps. In the first research project, I followed two goals: First, I examined whether people differ in their sensitivity to perceiving themselves (or others) as victims of moral transgressions across various moral concerns. In so doing, I developed an instrument that captures individuals' sensitivity to moral transgressions pertaining to fairness, care, loyalty, authority, and sanctity from four perspectives: the victim's, the observer's, the beneficiary's, and the perpetrator's perspective. Second, past research showed that VS is related to a conservative (right-wing) political orientation and antisocial attitudes towards other groups (Rothmund et al., 2020), which corroborates the theoretical assumption that victim-sensitive individuals prioritize self-oriented concerns and harbour anti-social cognitions (Gollwitzer et al., 2009, 2013). I built upon these findings by testing whether a sensitivity to perceiving oneself as a victim of various moral transgressions is associated with a conservative political orientation and anti-immigration attitudes.

In the second research project, I investigated the relationship between VS and anti-immigration attitudes and behaviour. Past findings indicate that VS is positively correlated with anti-immigration attitudes (Rothmund et al., 2020), and a study found that contextual cues, which suggest that immigrants harbour exploitative intentions, elicit negative sentiments towards immigrants among victim-sensitive individuals (Süssenbach & Gollwitzer, 2015, Study 2). However, it is unclear whether VS causally predicts anti-immigration attitudes, what psychological process drives the effect of VS on anti-immigration attitudes, and whether this effect leads to observable behaviour. Based on first empirical insights, as well as theoretical considerations elaborated on in the SeMI model (Gollwitzer et al., 2013), I tested (a) the causal effect structure between VS and anti-immigration attitudes, (b) whether a heightened fear of exploitation drives the effect of VS on anti-immigration attitudes, and (c)

whether this effect leads to downstream consequences on anti-social behaviour towards immigrants.

In the third research project, I examined the relationship between VS and collective pro-environmental engagement. Based on the idea that victim-sensitive individuals are particularly vigilant towards personal losses and disadvantages, a tendency that is positively related to proactive engagement in the political context (Traut-Mattausch et al., 2011), I predicted that victim-sensitive people will show *increased* engagement to mitigate climate change consequences when these consequences are perceived as directly relevant to the self (vs. not relevant to the self). Based on the notion that collective engagement can be seen as a social dilemma scenario (Irwin & Simpson, 2013), which has shown to trigger a fear of exploitation, and subsequently anti-social behaviour among victim-sensitive individuals (Gollwitzer et al., 2009), I predicted that victim-sensitive individuals will show *decreased* pro-environmental engagement when cues suggest that others could exploit their political engagement and that this effect is diminished (or even reversed) when the fear of exploitation is invalidated.

Together the research projects contribute to our understanding of the links between victim sensitivity and political attitudes and behaviour as well as the motivational and social cognitive processes that explain these links.

5. Summaries of the Manuscripts

This dissertation covers three manuscripts that include eight studies (Total $N = 5,047$) Pre-registrations⁵, primary data, codebooks, analysis scripts, materials, and if applicable

⁵ For Study 1 in Manuscript 2 and Study 1 in Manuscript 3, I re-analyzed existing datasets. Therefore, these studies were not pre-registered. Detailed information can be found in the respective manuscripts.

supplementary files for all studies are publicly accessible via online repositories. Links to these repositories can be found in the respective manuscripts.

5.1 Summary of Manuscript 1

The main aims of Manuscript 1 were to (a) examine whether combining different moral concerns (i.e. “foundations”) and (JS) perspectives improves the assessment of individual differences in moral judgments (compared to instruments only using moral foundations or perspectives), (b) examine whether individuals differ in their sensitivity to perceiving themselves (or others) as victims of moral transgressions, and (c) investigate the relationship between VS and political orientation across a variety of moral concerns. To this end, I adapted an instrument that has shown to capture people’s sensitivity to diverse moral concerns or “foundations” – the “Moral Foundations Questionnaire” (Graham et al., 2011) – to four perspectives: the victim’s, the observer’s, the beneficiary’s, and the perpetrator’s perspective (see section 1.2; Schmitt et al., 2010). Using a representative German national sample ($N = 2,042$), I tested the measurement properties of the newly developed “Moral Perspectives and Foundations Scale” as well as the relationship between people’s perspective-specific sensitivity to moral foundations and political orientation (i.e., on a left-right continuum) and attitudes (i.e., anti-immigration attitudes). An integrated model (combining moral foundations with perspectives) fit the data better than models only representing moral foundations or (justice sensitivity) perspectives. As expected, a sensitivity to perceiving oneself as a victim of transgressions of justice, care, authority, loyalty, and sanctity norms predicted right-wing political orientation and anti-immigration attitudes, corroborating, and extending earlier findings in the social justice domain (Rothmund et al., 2020). Exploratory analyses revealed a particularly strong association of a self-oriented (victim) sensitivity to violations of in-group norms (loyalty, authority, and sanctity) with a right-wing political orientation and anti-immigration attitudes.

Taken together, the findings suggest that we need to consider different moral concerns as well as perspectives when assessing individual differences in moral judgments. Importantly for this dissertation, the results indicate that people differ in their sensitivity to perceiving oneself or others as victims of various moral transgressions. Findings showing that a sensitivity to perceiving oneself as a victim of various moral transgressions is related to conservatism and anti-immigration attitudes indicates that the social-cognitive processes inherent to VS can be extrapolated to other moral concerns. In other words, the findings suggest that victim-sensitive individuals are concerned about being victimized by moral transgressions in general, which is related to a political orientation and political attitudes that emphasize self-protection (Rothmund et al., 2020; van Leeuwen & Park, 2009). Importantly, the findings indicate that VS incorporates not only a self-oriented concern on an individual level, but also a self-oriented concern on a group level (i.e., in-group norms, such as loyalty, authority, and sanctity).

5.2 Summary of Manuscript 2

The main aims of Manuscript 2 were to (a) examine whether VS causally predicts increased anti-immigration attitudes, (b) investigate the motivational and social-cognitive processes which drive the effect of VS on anti-immigration attitudes, and (c) test whether the proposed effect leads to downstream consequences on anti-social behaviour towards immigrants. To this end, I conducted three studies.

Study 1 examined the causal effect structure between VS and anti-immigration attitudes using panel data from an independent research project⁶ ($N = 1,038$). To test whether VS causally predicts anti-immigration attitudes, I examined the cross-lagged effect of VS at T1 (1996) on anti-immigration attitudes at T2 (1998) and subsequently the cross-lagged effect

⁶ Study 1 used panel data, which was collected in the context of a German research program between 1996 and 2000. More detailed information can be found in Manuscript 2.

of anti-immigration attitudes at T1 (1996) on VS at T2 (1998). I hypothesized that VS at T1 would predict anti-immigration attitudes at T2, and that anti-immigration attitudes at T1 would not predict VS at T2. Indeed, the results provided support for the predicted effect structure, thereby indicating that VS causally predicts anti-immigration attitudes.

Study 2 examined the motivational and social-cognitive processes that drive the effect of VS on anti-immigration attitudes. Based on the SeMI model (Gollwitzer et al., 2013), I predicted that a fear of exploitation mediates the effect of VS on anti-immigration attitudes. In order to test this hypothesis, I conducted an online experiment ($N = 299$) in which participants' fear of exploitation was manipulated in three experimental conditions. Using excerpts from a real federal report, participants' fear of exploitation was either not invalidated (i.e., participants were provided with information on immigrants' right to receive social benefits), invalidated (i.e., participants were provided with information showing that immigrants do not represent a burden for the welfare system), or countered (i.e., participants were provided with information showing that immigrants benefit the welfare system). I expected to find a positive effect of VS on anti-immigration attitudes in the "exploitation not invalidated," and that this effect would be diminished ("switched off"; cf. Jacoby & Sassenberg, 2011) in the "exploitation invalidated" and even more so in the "exploitation countered" condition. The results showed that VS predicted anti-immigration attitudes in the "exploitation not invalidated" conditions, however, the expected interaction effects (VS x exploitation invalidated; VS x exploitation countered) were not significant, thereby providing no empirical support for the hypothesis that a fear of exploitation mediates the effect of VS on anti-immigration attitudes.

Study 3 used a more controlled study setting to conservatively examine whether the fear of exploitation mediates the relationship between VS and anti-immigration attitudes, and additionally, whether this effect leads to downstream consequences on anti-social behaviour

towards immigrants. Specifically, I conducted a laboratory experiment ($N = 178$) in which participants played an incentivised public goods game. After participants played the game with an ostensible in-group (“host nation”), a worse performing fictitious out-group (i.e., “immigrants”) asked to join the participants’ in-group (exploitation cue). Here, participants were asked to report how many “immigrants” should join the in-group (Behaviour T1) and their attitudes towards the out-group (Attitudes T1). The number of “immigrants” to join was said to be chosen randomly from the decisions given by participants but this number was in fact held constant. In three experimental conditions, the group’s performance with “immigrants” in the following round either declined (*exploitation not invalidated*), remained unchanged (*exploitation invalidated*), or improved (*exploitation countered*) compared to the first round. After this round, behaviour (T2) and attitudes (T2) were captured again. Testing the same hypotheses as in Study 2, I expected to find an intra-individual increase of anti-immigration attitudes and anti-social behaviour among victim-sensitive participants in the exploitation not invalidated condition. I expected that this effect should be diminished in the exploitation invalidated and even more so in the exploitation countered condition. The results indicated ceiling effects on the dependent variables at T1, which implied that the intra-individual difference (T2-T1) lost its explanatory value for the hypothesis tests. Therefore, we relied on T2 measurements, to examine whether “invalidating” or “countering” exploitation cues diminishes the effects of VS on anti-immigration attitudes and behaviour. The results indicated that VS predicted both anti-immigration attitudes and behaviour when cues of exploitation are present, but that this effect could not be diminished by invalidating or countering the fear of exploitation.

Taken together, the three studies suggest that VS predicts increased anti-immigration attitudes when cues of exploitation are present, and that this effect leads to downstream consequences of antisocial behaviour towards immigrants. Findings indicating that this effect

cannot be “switched off” can point towards theoretical issues (i.e., the effect of VS on anti-immigration attitudes is also driven by other variables than fear of exploitation, for instance, an aversion towards uncertainty) or methodological issues (i.e., the manipulations were not strong enough to counter the fear of exploitation).

5.3 Summary of Manuscript 3

The main aim of Manuscript 3 was to examine the psychological processes inherent to VS, which can promote or impede pro-environmental engagement. To this end, I conducted three online experiments.

In the first two studies, I examined the “active protection pathway,” which posits that victim-sensitive individuals show pro-environmental engagement when they perceive that climate change consequences will lead to personal disadvantages (i.e., victimization). Based on prior research examining political engagement (Traut-Mattausch et al., 2011), I manipulated perceived victimization by varying the degree of self-relevance of climate change consequences. In Study 1 ($N = 386$) participants were presented with a vignette describing a political initiative advocating for a mandatory annual “environmental service day” at which citizens engage in project work aimed at urban sustainability and climate neutrality at least one day per year to mitigate climate change consequences. A flyer promoting this initiative, framed climate change consequences either in non-self-relevant terms or in self-relevant terms. Political engagement was measured by capturing participants’ support of the pro-environmental policy. The results indicated that framing climate change consequences in self-relevant terms (vs. non-self-relevant terms) did not motivate VS-high participants to support the pro-environmental policy providing no empirical support for the active protection pathway. In Study 2 ($N = 617$), I addressed some methodological shortcomings of Study 1 to test the “active protection pathway” more conservatively. Again, perceived victimization was manipulated by varying the perceived self-relevance of climate

change consequences in a similar vignette. Participants were randomly allocated to experimental conditions in which climate change consequences were either framed in non-self-relevant terms, in individually relevant terms or in group relevant terms. Following the theoretical assumptions postulated in the “active protection pathway,” I predicted that framing climate change consequences as individually relevant or in-group-relevant (vs. non-self-relevant) motivates VS-high participants to show pro-environmental engagement (policy support and protest behaviour). The results did not support the active protection pathway.

In Study 3 ($N = 278$), I examined the “passive protection pathway,” which posits that victim-sensitive individuals show *decreased* pro-environmental engagement when there is reason to believe that they are being exploited (for instance by “social loafers” who intentionally do not contribute to the public good to unilaterally profit from others’ engagement). To this end, I scrutinized the suggested psychological process (fear of exploitation; Gollwitzer et al., 2013) by examining whether the expected negative effect of VS on pro-environmental engagement can be significantly diminished when the fear of exploitation is experimentally removed. Based on prior research, I employed a descriptive norm manipulation with the aim of diminishing victim sensitives’ fear of exploitation. In other words, I attempted to diminish victim sensitives’ fear of exploitation by providing information suggesting that it is “normal” to engage in cooperative behaviour (cf. Gollwitzer et al., 2009). Similar to the first two studies, participants were introduced to a vignette in which a political campaign was described. This campaign promoted a local water-saving initiative to mitigate climate change consequences. Participants were randomly allocated to one of two experimental conditions in which they either read that 32% of their fellow citizens (low descriptive norm condition) or 93% of their fellow citizens (high descriptive norm condition) contributed to a similar aim in the context of a prior political campaign. Based on the notion of “passive protection,” I expected that participants high in VS would show

decreased pro-environmental engagement when a low descriptive norm is perceived (*exploitation not invalidated*), and that this effect would be significantly reduced (or reversed) when a high descriptive norm is perceived (*exploitation invalidated*). As expected, the results showed that VS was negatively related to pro-environmental engagement in the low descriptive norm condition. However, contrary to my prediction, the perception of a high descriptive norm did not diminish this effect. A manipulation check revealed that the high descriptive norm manipulation did not reduce the fear of exploitation among victim-sensitive individuals.

In conclusion, the first two studies did not provide support for the “active protection pathway,” according to which people high in VS show increased pro-environmental engagement when they feel personally disadvantaged by climate change consequences. The third study provides some (though inconclusive) empirical support for the “passive protection pathway,” according to which victim-sensitive individuals show decreased pro-environmental engagement due to a heightened fear of being exploited by “social loafers”. The unsuccessful attempt to scrutinize the assumed mechanism by “switching off” the psychological processes (i.e. diminishing victim sensitives’ fear of exploitation) points towards the robustness of the “passive protection pathway.”

6. Manuscript 1: Moral Sensitivity and Political Orientation

Let's Put this into Perspective: Combining Moral Foundations and Justice Sensitivity Perspectives to Understand Political Orientation

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https://osf.io/kr84d/?view_only=b2de53b56aae426b8487a5a9c927423a

Abstract

Political orientation is systematically related to individuals' generalized views about morality and their endorsement of different moral domains. Yet, current findings in the justice sensitivity literature suggest that differences between conservatives and liberals can also be explained by a sensitivity to self-oriented or other-oriented moral violations. Here, we argue that integrating foundations and perspectives - more specifically, conceptualizing moral foundations as perspective-specific – substantially advances our understanding of differences in moral judgments across the political spectrum. We describe the development of a new instrument measuring perspective-specific moral foundations and test it in a representative German national sample ($N = 2042$). Our findings show that (a) an integrated foundations \times perspective model fit the data better than models only representing moral foundations or (justice sensitivity) perspectives and (b) a self-oriented moral sensitivity predicts right-wing political orientation, while an other-oriented moral sensitivity positively predicts left-wing political orientation across all moral foundations. Implications for prior claims in the moral foundations and justice sensitivity literature as well as possible avenues for future research are discussed.

Keywords: Moral foundations, justice sensitivity, perspectives, political orientation, morality

Let's Put this into Perspective: Combining Moral Foundations and Justice Sensitivity

Perspectives to Understand Political Orientation

Political orientation – peoples' self-reported location on a left-right (or liberal-conservative) dimension, their preferences for political parties and their opinions about political issues – is systematically related to generalized views about morality (Bierbrauer & Klinger, 2002; Milesi, 2016; van Leeuwen & Park, 2009). Indeed, moral judgments account for a third of the interindividual variation in political orientation – which is more than what basic demographic variables or religious beliefs can explain (see Miles & Vaisey, 2015). Theoretically, the link between moral judgments and political orientation is often addressed from the perspective of “Moral Foundation Theory” (MFT; Haidt & Graham, 2007; Haidt & Joseph, 2004). The central premise of MFT is that people's sense of what is “right” or “wrong” does not depend on one, but on several distinct systems or “foundations” of morality. To date, most research has focused on five moral foundations: care/harm, fairness/cheating, loyalty/betrayal, authority/subversion, and sanctity/degradation⁷. Empirical investigations found that political orientation covaries with the extent to which people endorse each of these foundations, respectively (e.g., Di Battista, Pivetti, & Berti, 2018; Graham, Haidt, & Nosek, 2009; Ji & Janicke, 2018; Kivikangas et al., 2021; Kivikangas, Lönnqvist, & Ravaja, 2017).

That said, MFT is not the only theoretical perspective that claims to explain how moral judgments and political orientation are linked. Another perspective is offered by research on justice sensitivity, that is, the dispositional tendency to encounter, react to, ruminate about, and act against injustices in one's everyday life (e.g., Baumert & Schmitt, 2016). A crucial assumption in this literature is that people can be justice-sensitive from different perspectives (i.e., victim, observer, beneficiary, and perpetrator), and research shows

⁷ The discussion about how many moral foundations can be differentiated and how they can be conceptually separated is ongoing and not yet resolved (see <https://moralfoundations.org/>).

that political orientation covaries systematically with one's sensitivity to injustice from each of these four perspectives (see Rothmund, Bromme, & Azevedo, 2020).

Here, we argue that combining the ideas that (a) people are sensitive to violations of different moral foundations and that (b) people approach these violations from different perspectives substantially advances our understanding of differences in moral judgments across the political spectrum. In the present paper, we develop (and scrutinize) a perspective-specific approach to moral foundations for predicting political orientation and we discuss what such a combination can buy us – both conceptually and empirically.

Moral Foundations Theory

Moral Foundations Theory builds upon the assumption that “the moral mind is partially structured in advance of experience so that five (or more) classes of social concerns are likely to become moralized during development” (Haidt & Joseph, 2008, p. 381). Most empirical work has pointed to five moral foundations: (1) care/harm (2) fairness/cheating (3) loyalty/betrayal (4) authority/subversion, and (5) sanctity/degradation (Haidt & Graham, 2007; see also Graham et al., 2011, 2013; Haidt, 2012, 2013; Kivikangas et al., 2021; Tamul et al., 2020). The care/harm foundation refers to concerns about caring, nurturing, and protecting vulnerable people from harm; the fairness/cheating foundation describes concerns for and emotional reactions towards inequalities in mutual exchanges; the loyalty/betrayal foundation relates to a concern for recognizing, trusting, and cooperating with members of one's in-group; the authority/subversion foundation includes emotional reactions and a concern for hierarchies and authorities; finally, the sanctity/degradation foundation incorporates reactions to physical and meta-physical things that are either perceived as disgusting and impure or as elevated and sanctified (Graham et al., 2011; Haidt & Graham, 2007).

The five moral foundations can be classified into two higher-order categories: The first two foundations, care/harm and fairness/cheating, are usually referred to as “individualizing foundations” as they are primarily concerned with the welfare of individuals and the responsibility to protect the rights and freedoms of individual people. The latter three foundations, loyalty/betrayal, authority/subversion, and sanctity/degradation, are described as “binding foundations,” because they focus on preserving the group and its institutions with traditions, nationalism, and religion being focal topics (see Graham, Haidt, & Nosek, 2009).

Research on MFT suggests that liberals endorse “individualizing foundations” more strongly than “binding foundations,” whereas conservatives endorse all five moral foundations more equally (Graham, Haidt, & Nosek, 2009). This finding has been reproduced in multiple countries (e.g., Di Battista, Pivetti, & Berti, 2018; Nilsson & Erlandsson, 2015; Kivikangas et al., 2021; Yalçındağ et al., 2019). Indeed, moral foundations predict attitudes towards specific political issues on which conservatives and liberals typically disagree. For instance, whereas a concern for the care foundation predicts support for gun control and opposition to torture, a concern for the loyalty foundation predicts support for increased defense spendings and using aggressive measures against terrorism (Koleva et al., 2012).

While MFT has inspired a great deal of research in moral and political psychology as well as social justice research, some aspects of the theory have faced criticism. According to the Theory of Dyadic Morality (TDM; Gray, Schein & Ward, 2014; Schein & Gray, 2015, 2018), for instance, the idea that moral judgments are based on a set of moral “modules” is rejected; instead, TDM proposes that moral judgments are based on a very simple cognitive template that involves (a) a perception of harm, (b) a harm-doer (a moral “agent”) and (c) a victim (a moral “patient”). Notably, this theory implies that the extent to which a person perceives harm (or “immorality”) depends less on the moral domain in which the

transgression occurred, but more on the perspective from which a person perceives an immoral episode.

Moral Foundations Theory does not consider perspectives. From a methodological point of view, the neglect of perspectives becomes apparent in the operationalization of moral foundations. The Moral Foundations Questionnaire (MFQ, Graham et al., 2009; Graham et al., 2011) and the Moral Foundations Sacredness Scale (MFSS; Graham & Haidt, 2012), two scales developed to measure how much individuals endorse specific moral foundations, reflect moral concerns from different perspectives without taking the issue of perspectives into account explicitly. The MFQ consists of two sub-scales, one of which implies an observer perspective (e.g. “Whether or not someone showed a lack of respect for authority”; relevance sub-scale; Graham et al., 2011), whereas the other sub-scale either does not specify any perspective (“It is more important to be a team player than to express oneself”) or takes an observer perspective (“People should be loyal to their family members, even when they have done something wrong”; judgment sub-scale, Graham et al., 2011). In another self-report instrument developed to measure moral foundations, the “Moral Foundations Sacredness Scale” (Vecina, 2014), people are asked to indicate how much money somebody would have to pay them to commit a moral wrong, thereby asking them to take the perpetrator perspective. In another example, Clifford and colleagues introduced a set of Moral Foundation Vignettes to examine reactions towards violations of different moral foundations, most of which were formulated from an observer’s perspective (e.g., “you see a runner taking a shortcut on the course during the marathon in order to win,” which aims to measure the importance of “fairness; see Clifford et al., 2015).

By neglecting the possibility that people take a certain perspective when reflecting upon moral issues, MFT implicitly assumes that, for instance, conservatives and liberals differ reliably in their endorsements of individualizing and binding foundations irrespective of

whether they reflect on these foundations from an observer's, a victim's, a beneficiary's, or a perpetrator's perspective - an assumption that is doubtful, as we argue here.

Justice Sensitivity

Justice Sensitivity (JS) focuses on individual differences in how people perceive and react to experienced or observed injustice (Dar & Resh, 2001; Huseman, Hatfield, & Miles, 1987; Lovas & Wolt, 2002; Van den Bos, Maas, Waldring, & Semin, 2003). It reflects individuals' stable dispositions to react to injustice across time and situations (Schmitt, 1996; Schmitt, Gollwitzer, Maes, & Arbach, 2005; Schmitt, Baumert, Gollwitzer, & Maes, 2010), and it reliably predicts behavioral reactions to perceived unfairness in organizational contexts (Schmitt & Dörfel, 1999), in real-life solidarity-related contexts (Gollwitzer, Schmitt, Schalke, Maes, & Baer, 2005; Stavrova & Schlösser, 2015), or in laboratory contexts (e.g., Mohiyeddini & Schmitt, 1997; Maltese, Baumert, Schmitt, & MacLeod, 2016).

Based on the notion that episodes of injustice typically involve multiple perspectives (Mikula, Petri, & Tanzer, 1990), Schmitt et al. (2005) showed that people can differ in their justice sensitivity depending on the perspective from which people experience injustice – the victim, the beneficiary, or a neutral observer's perspective. Later, Schmitt et al. (2010) added a fourth perspective (the perpetrator) and provided reliable and valid self-report scales (the “Justice Sensitivity Inventory” JSI) to measure each of these perspective-specific sensitivities. Interestingly, intercorrelations between the observer, beneficiary, and perpetrator JS scales are quite high, whereas these scales are only moderately correlated with the victim sensitivity scale (Baumert, Beierlein et al., 2014; Schmitt et al., 2005, 2010). Schmitt et al. (2010) therefore reasoned that victim sensitivity reflects a sense of “justice for the self”, whereas observer, beneficiary and perpetrator sensitivity reflect a sensitivity to different forms of “other-oriented” injustices (for a review, see Baumert & Schmitt, 2016; for a review specifically on the victim perspective of JS, see Gollwitzer, Rothmund, & Süssenbach, 2013).

First results on the relationship between justice sensitivity and political orientation suggest that perspectives matter. For instance, Rothmund and colleagues (2020) found that victim sensitivity is positively related to populist attitudes, anti-immigration sentiments, as well as preferences for populist radical right-wing actors, whereas the three other-oriented JS perspectives are negatively related to anti-immigration sentiments and populist radical right-wing actors. Replicating these findings in a sample with German adolescents (13-18 years), Jahnke and colleagues (2020) showed that victim sensitivity was related to right-wing political attitudes, whereas the other-oriented JS perspectives were related to left-wing political attitudes. An explanation for these findings is that a right-wing or conservative ideology tends to emphasize self- (or in-group) oriented morality concerns (van Leeuwen & Park, 2009), which have been associated with victim sensitivity (Rothmund, Stavrova, & Schlösser, 2017), and that a left-wing ideology interprets morality in a less in-group focused but more other-oriented manner (Rothmund, Becker, & Jost, 2016), which is in line with correlational findings (Gollwitzer et al., 2005).

In sum, research on justice sensitivity has repeatedly demonstrated how important it is to differentiate between different perspectives from which injustice can be experienced. That said, this line of research has paid limited attention to the specific moral foundations that may be violated in an unjust episode. After all, experienced injustices may reflect a violation of individualizing or binding foundations. For instance, unequal treatment would reflect a violation of the “fairness” foundation, betrayal would imply a violation of the “loyalty” foundation and disrespectful behavior could reflect a violation of the authority foundation. Research on these moral foundations suggests that people reliably differ in which of these foundations matter to them and which do not.

The Present Research

The central argument in this paper is that integrating the five moral foundations (care, fairness, authority, loyalty, and sanctity) with the four justice sensitivity perspectives (victim, observer, beneficiary, and perpetrator) substantially advances our understanding of differences in moral judgments across the political spectrum. Conceptually, MFT may profit from differentiating between different perspectives just as much as JS may profit from differentiating between different “foundations.” More specifically, the extent to which people react to violations of each of the five “moral foundations” may vary to the extent that they are (a) the victim, (b) the beneficiary, (c) the initiator (i.e., perpetrator), or (d) a neutral observer. Likewise, the extent to which people are sensitive to a moral violation from a particular perspective may vary to the extent that it is a violation of an “individualizing” or a “binding” foundation. Thus, we propose that moral foundations should be measured from several perspectives and that, vice versa, people’s reactions to experienced injustice should be measured on several moral foundations. The measure we introduce here - the “Moral Perspectives and Foundations Scale” (MPFS) - was developed to achieve exactly that.

The measurement model that results from combining foundations and perspectives is depicted in Figure 1. Specifically, this combination results in 5 (foundations) \times 4 (perspectives) unique factors—perspective-specific moral foundations. A central assumption of this model (which we will test here) is that this 20-factor model cannot be reduced to either a model only representing the five moral foundations or only representing the four perspectives without loss of model fit. Having established this, we will then scrutinize the predictive validity of the 20 perspective-specific moral foundations. To do so, we measure political self-identification (left-right), voting behavior, and anti-immigration attitudes and we explore whether (a) the five moral foundations (as proposed by MFT research), (b) the four

perspectives (as proposed by JS research), or (c) specific combinations of these (i.e., perspective-specific moral foundations) predict these politically relevant outcomes best.

Method

Sample

We conducted an online survey with a German national sample. Quota sampling based on census data was used to represent the adult population of Germany with regard to gender, and level of education (Destatis, 2020). The sample was recruited between February 15th and March 3rd, 2021 by the professional survey company Respondi (www.respondi.com). Data collection was funded by PsychLab, a service of the Leibniz Institute for Psychology (ZPID). We were unable to determine the necessary sample size based on statistical power because the effects specified in our hypotheses had not been tested before. Our preregistered sample size estimation was based on studies testing the predictive validity of moral foundations (Graham et al., 2009; Study 1, $N = 1613$) as well as justice sensitivity (Rothmund et al., 2020, $N = 2348$) in the context of political orientation. The final sample consisted of 2042 participants including 49.5% female and 50.5% male participants with an age range of 18 to 69 years ($M = 46.45$, $SD = 13.85$). Fifty per cent of participants did not have a high school degree, 28.6% had a high school (but no academic) degree, and 21.4% had an academic degree. The primary data, materials, sample information, analysis scripts, and additional information about the study (including item adaptation and translation process⁸) are publicly available as scientific use files: https://osf.io/kr84d/?view_only=b2de53b56aae426b8487a5a9c927423a.

⁸ The item adaptation process is based on (a) item-construction principles (see supplementary online material) and (b) a double-blind review process coordinated by the Leibniz Institute for Psychology (ZPID) prior to data collection. The back-translation process was conducted by a psychological researcher from the US who worked in our lab at that time.

Measures

Perspective-Specific Moral Foundations Sensitivity. We developed the Moral Perspectives and Foundations Scale (MPFS), which crosses each of the five moral foundations with each of the four justice sensitivity perspectives, yielding 20 first-order factors (see Figure 1). Specifically, we adapted both sub-scales of the Moral Foundations Questionnaire, the relevance sub-scale and the judgment sub-scale. The relevance sub-scale prompts participants to report to what extent certain considerations are relevant to their thinking when deciding whether something is right or wrong (ranging from 1 = not at all relevant to 6 = extremely relevant). The judgment sub-scale prompts participants to report their agreement with different statements related to the moral foundations (1 = strongly disagree vs. 6 = strongly agree). The original scale contains 30 items: 6 items for each moral foundation, which we reworded so that they reflect a particular perspective (i.e., victim, observer, beneficiary, perpetrator; see Schmitt et al., 2010). Doing so results in a 120-item measure (see supplementary online material for the full set of items).

In order to ensure that the perspective-specific MFQ items follow a clear sentence structure while capturing both moral foundations and perspectives as precisely as possible we adapted all items according to a set of pre-registered principles (see supplementary online file). For instance, for the “relevance” sub-scale, we adapted an original moral foundation item measuring the relevance of the authority foundation (“Whether or not someone showed a lack of respect for authority”) to capture the victim perspective (“Whether someone showed a lack of respect for authority”), the observer perspective (“Whether someone showed a lack of respect for someone else’s authority”), the beneficiary perspective (“Whether I profited because someone showed a lack of respect for someone else’s authority”), and the perpetrator perspective (“Whether I showed a lack of respect for someone’s authority”). For the “judgment” sub-scale, we reformulated an original item measuring the care foundation

(“Compassion for those who are suffering is the most crucial virtue”) to capture the victim perspective (“It bothers me, if someone does not show compassion for me when I suffer”), the observer perspective (“It bothers me, if someone does not show compassion for someone else when that person suffers”), the beneficiary perspective (“It bothers me, if I benefit from the fact that someone does not show compassion for someone else who is suffering”), and the perpetrator perspective (“It bothers me, if I do not show compassion for someone else when that person suffers”).

Political Self-Identification. We used a single item to assess political self-identification (see, e.g., Süßenbach & Gollwitzer, 2015): “In politics, people often talk about the ‘left’ and the ‘right.’ Where would you place yourself on the following continuum?” (1 = left to 7 = right).

Voting behavior. In order to assess voting behavior, we employed a single item measure also referred to as the “Sunday question” (in German: “Sonntagsfrage”, because general elections are always held on a Sunday; see Infratest Dimap, 2021): “Which party would you vote for if federal elections were held this Sunday?”. Eight options were proposed, including Die Linke (a far-left party), Bündnis 90/Die Grünen (the “green” party located on the left side of the continuum), SPD (“social democrats,” which are located center-left), CDU/CSU (“Christian democrats”, which are center-right), FDP (“liberal democrats”, which are located center-right when it comes to societal values and a free-market ideology), AfD (the “alternative for Germany,” a far-right party), “other,” or “none”.

Anti-immigration attitudes. We used 5 items to capture anti-immigration attitudes (European Social Survey, 2018; Rothmund et al., 2020; $\alpha = .93$). Example items read, “Borders should be closed for immigrants” and “Immigrants increase crime rates;” 1 = strongly disagree to 6 = strongly agree).

Results

Based on current guidelines (Hair et al., 2014), 43.3% of items in the judgment sub-scale indicated non-normal distributions (more information in the supplementary online file). In addition, items 7,10 and 11 were excluded as they indicated strong skewness values across all perspective-specific adaptations of the MFT item.

Measurement Model

To test whether our measurement model (see Figure 1) cannot be reduced to either a model only representing the five moral foundations or only representing perspectives without loss of model fit, we conducted a confirmatory factor analysis (CFA) using *Mplus* (Version 8.1, Muthén & Muthén, 1998-2018). We specified three models: (1) A 20-factor model (i.e., 5 foundations \times 4 perspectives; i.e., no restrictions were imposed on factor loadings), (2) a 5-factor model, in which factor loadings for items indicating the same moral foundation were restricted to be equal across all four perspectives and (3) a 4-factor model, in which factor loadings for items indicating the same perspective were restricted to be equal across all five moral foundations. As convergence could not be achieved when including the judgment sub-scale, we decided to use only the relevance sub-scale, as was previously done when testing Moral Foundations Theory in the context of political orientation (Graham et al., 2009).

As reported in Table 1, Model 1 (i.e., 20 factors) fit the data adequately (CFI = .906, TLI = .893, SRMR = .071), whereas Model 2 (i.e., 5 factors representing moral foundations; CFI = .757, TLI = .732, SRMR = .097) and Model 3 (i.e., 4 factors representing perspectives; CFI = .783, TLI = .762, SRMR = .100) showed a worse model fit. Thus, a model assuming the perspective-specific moral foundations to be distinct (Model 1) fit the data better than a model in which moral foundations are collapsed across perspectives (Model 2) or a model in which perspectives are collapsed across foundations (Model 3). As specified in our preregistration, we expected that an adequate model fit would necessitate allowing residual

inter-correlations between items that share semantic characteristics. Thus, to increase model fit, we allowed residual inter-correlations based on an inspection of modification indices (more information in the supplementary online file).

Political Orientation

In order to explore how perspective-specific moral foundations predict right-wing political self-identification, right-wing voting, and anti-immigration attitudes, we first examined bivariate correlations between the second-order factors (i.e., the victim, observer, beneficiary and perpetrator perspectives as well as the care, fairness, authority, loyalty, and sanctity foundations; see Figure 1) and our dependent variables (see Table 2 for an overview of the descriptive statistics and bivariate correlations). As expected, the victim – or self-oriented – sensitivity to moral violations was positively correlated with right-wing political self-identification, right-wing voting, and anti-immigration attitudes across the five moral foundations. The other-oriented sensitivities to moral violations showed a weaker (observer sensitivity; beneficiary sensitivity in the case of anti-immigration attitudes) or no correlation (beneficiary and perpetrator sensitivity) with the dependent variables. With regard to the moral foundations, loyalty and authority were positively correlated with right-wing political self-identification, right-wing voting and anti-immigration attitudes- Care was negatively correlated with the dependent variables. Fairness was negatively correlated with right-wing political self-identification and sanctity was positively correlated with anti-immigration attitudes.

We then specified a path model focusing on the associations between the second-order factors (four perspectives and five moral foundations) and the three dependent variables (significant standardized estimates are presented in Figure 2). The findings show that the victim-perspective is positively related to right-wing political self-identification and anti-immigration attitudes across all five moral foundations. Conversely, the other-oriented

perspectives, observer, beneficiary and perpetrator showed either a negative relation or no relation to the outcome variables. Specifically, sensitivity to moral violations from an observer perspective was negatively related to right-wing political self-identification and to anti-immigration attitudes. Sensitivity to moral violations from a beneficiary perspective was negatively related to right-wing voting behavior and sensitivity to moral violations from a perpetrator perspective was negatively related to anti-immigration attitudes. On the other hand, while the loyalty and authority foundations positively predicted right-wing political self-identification and anti-immigration attitudes, the sanctity foundation negatively predicted right-wing political self-identification and anti-immigration attitudes across the different perspectives.

Exploratory Analyses

Above and beyond the “main effects” of all five moral foundations and all four perspectives on political orientation, voting behavior, and anti-immigration attitudes, we specified additional models in order to explore whether specific conceptualizations of foundations and perspectives as well as combinations between foundations and perspectives predict these three dependent variables, respectively.

First, we specified a model, in which we combined the observer, beneficiary, and perpetrator perspectives into an “other-oriented” sensitivity factor, while treating the victim perspective as a “self-oriented” sensitivity” factor. This is based on the idea that victim sensitivity reflects a sense of “justice for the self”, whereas the observer, beneficiary and perpetrator perspectives reflect a sensitivity to different variations of “other-oriented” injustices (for a review, see Baumert & Schmitt, 2016; for a review specifically on the victim perspective of JS, see Gollwitzer, Rothmund, & Süßenbach, 2013). This perspective-specific conceptualization has proven to be valid in predicting political outcome variables (e.g., Rothmund et al., 2020). In addition, we combined the moral foundations care and fairness

into an “individualizing foundations” factor and loyalty, authority, and sanctity into a “binding foundations” factor - a conceptualization of MFT that has been frequently used in prior research (e.g., Graham et al., 2009; Hadarics & Kende, 2021; Napier & Luguri, 2013). For a visualization of this model, see Figure 3. While the self-oriented factor was positively associated with right-wing political self-identification, right-wing voting, and anti-immigration attitudes, the other-oriented factor was negatively associated with right-wing political self-identification, right-wing voting, and anti-immigration attitudes. Individualizing moral foundations were negatively related to right-wing political self-identification and anti-immigration attitudes. By contrast, binding moral foundations were positively related to right-wing political self-identification and anti-immigration attitudes.

In a final step, we explored whether specific combinations of moral foundations and perspectives can help us in predicting political orientation, including political self-identification, specific opinions regarding immigration, and voting behavior. To do so, we defined perspective-specific individualizing and binding moral foundations (Figure 4). In this model, especially the perspective-specific binding foundations significantly predicted political self-identification and anti-immigration attitudes: While a *self-oriented* sensitivity to violations of the binding foundations predicted right-wing political self-identification and anti-immigration attitudes, an *other-oriented* sensitivity to violations of the binding foundations negatively predicted right-wing political self-identification and anti-immigration attitudes. Additionally, a self-oriented sensitivity to violations of the individualizing foundations negatively predicted anti-immigration attitudes.

Discussion

A large and growing body of research has investigated how conservatives and liberals differ in their moral judgments. On the one hand, the moral foundations literature suggests that people on opposing sides of the political spectrum differ in their moral intuitions – in

other words, the moral foundations that they endorse (Graham et al., 2009; Koleva et al., 2012). On the other hand, the justice sensitivity literature suggests that whereas conservatives tend to be especially sensitive to self-related injustice, liberals are more sensitive to other-related injustice (Rothmund et al., 2020; Rothmund et al., 2017). In the current research project, we integrated these two theoretical approaches and developed an instrument measuring perspective-specific moral foundations, in which each of the five moral foundations is framed from four different perspectives (i.e., victim, perpetrator, beneficiary, observer). We tested the measurement properties of this novel instrument and explored whether perspective-specific moral foundations predict political outcomes - political orientation, voting behavior, and anti-immigration attitudes - better than perspective-unspecific moral foundations or foundation-unspecific perspectives alone. To do so, we used a German national sample, representative of the German adult population regarding gender and level of education.

First, our results indicate that conservatives (vs. liberals) are more sensitive to self-oriented violations across the moral spectrum. On the one hand, this corroborates earlier findings showing that conservatives endorse moral foundations more when their political in-group is affected by a moral wrong; Voelkel & Brandt, 2019). On the other hand, the current findings also suggest that conservatives' moral judgments are marked by a heightened sensitivity to be the victim of moral violations in general rather than a specific sensitivity towards violations of particular moral domains (or "foundations"). These insights extend prior findings showing that conservatism is partially a consequence of fear- and anxiety related variables (e.g., Jost et al., 2003; Rothmund et al., 2020; Van Leeuwen & Park, 2009). Research on justice sensitivity suggests that ideological tendencies related to conservatism, such as nationalism, nativist attitudes, and right-wing authoritarianism are related to a dispositional fear of being victimized (Rothmund et al., 2020; Rothmund et al., 2017). The

present study contributes to and extends these findings by showing that this sensitivity to being victimized, which is reliably associated with conservatism, pertains to a range of moral domains, from violations of norms regarding one's authority, loyalty, purity, fairness, and care.

On the other hand, our findings indicate that liberals harbor an other-oriented sensitivity to moral violations across all five moral foundations. Prior examinations of the moral underpinnings of political orientation showed that liberals prioritize moral domains with an other-related focus, such as care and fairness (e.g., Graham et al., 2009) and other-related moral values, such as benevolence (e.g., Jones et al., 2018; Miles & Valsey, 2015). Based on the present findings, it seems that liberals do not merely prioritize other-related moral domains per se; rather, they are generally more sensitive to moral violations that happen to others – more so than conservatives. This supports the notion that liberals expand their empathy toward larger, farther, and more encompassing social circles than conservatives (Waytz, Iyer, Young, & Graham, 2016).

The differences between liberals and conservatives in their perspective-specific sensitivity to moral violations become especially apparent when combining the self- versus other-oriented perspectives from the justice sensitivity literature with the individualizing versus binding conceptualizations from the moral foundations literature (Figure 4). In this model, particularly the perspective-specific *binding* foundations predicted political orientation. While a sensitivity to violations of the binding foundations from a victim perspective predicted conservatism, a sensitivity to violations of the binding foundations from an other-oriented perspective predicted liberalism. Thus, past findings showing that liberals prioritize binding foundations less than conservatives (e.g., Graham et al., 2009; Kim, Kang, & Yun, 2012; Nilsson & Erlandsson, 2015) might be explained by the fact that participants were made to reflect upon the violations from a self-oriented perspective based on the

structure of the Moral Foundations Questionnaire (see Graham et al., 2011). Liberals seem to be almost as attuned to violations of binding foundations as conservatives when these violations affect others. In fact, past findings showing that conservatives endorse binding foundations more than liberals (Graham et al., 2009) are only replicated if violations are framed from a victim's perspective. The difference across the political spectrum is visibly reduced when violations of binding foundations are framed as affecting others (Figures 5-8).

Notably, we find a particularly strong relation between a self-oriented sensitivity to binding foundations and conservatism. Thus, conservatives seem to be particularly concerned about moral violations pertaining to their in-group and its norms. Previously, it has been argued that conservatives simply focus on moral values that emphasize preserving the group and its institutions with traditions, nationalism, and religion being focal topics (i.e., Graham et al., 2009) and that conservatives generally express compassion towards more well-defined and less encompassing entities (i.e., parochialism; Waytz et al., 2019). However, the current findings question whether a concern for binding foundations represents a concern for "moral values" or whether it reflects preferences based on right-wing authoritarianism and social dominance (Kugler et al., 2014). Specifically, our findings indicate that conservatives are particularly sensitive to violations of "binding foundations" when these violations affect their own group. By contrast, violations of "binding foundations" that affect other groups matter less to conservatives. This questions the notion that conservatism reflects a generalized, universal endorsement for "binding foundations."

The current findings show that an integration of moral foundations and perspectives bears practical and theoretical value. While we have elaborated on our findings showing that a perspective-specific approach to moral foundations can help explain differences in political orientation, the validity of our measurement model also provides important insights for moral psychology in general. Even though the theoretical concept of "morality" implies a form of

universalism, people usually make moral judgments in specific social settings. In such situations, it matters who commits or receives a wrongdoing. Past research provides ample evidence for the idea that social judgments depend on both the targets' and the perceivers' race, gender, age, religion and group affiliation (e.g., Hester & Gray, 2020). The current insights extend this idea by arguing that moral judgments do not only depend on the targets' and the perceivers' identity, but also on whether one judges a moral wrong as a target or the perceiver. This affects various empirical findings in the moral psychology literature:

For instance, when people judge moral dilemmas, in which killing one will save the lives of others, research shows that peoples' decision partly depends on certain situational properties. In the original "trolley dilemma", one can save five people by diverting the trolley onto a sidetrack where the trolley will only kill one person (Foot, 1978; Thompson, 1985). Here, most people approve of the five-for-one tradeoff – a so-called "utilitarian" decision (Cushman et al., 2006; Greene et al., 2001). In a similar moral dilemma, one can save the five lives by pushing a person off a footbridge into the trolley's path. People are less inclined to approve of this act, even though the consequence does not differ from the first situation (e.g., Greene et al., 2009). This has been explained by peoples' disapproval of "personal force" – i.e. using one's own force to kill a person in order to save lives as opposed to deflecting an existing threat (Cushman et al., 2006; Greene et al., 2009).

Based on our finding that judgments of what is right or wrong also depend on an individual perspective-specific sensitivity, one could assume that the aversion towards using personal force is even stronger among people who are sensitive to moral transgressions from a perpetrator's perspective. Notably, studies that employ these moral dilemmas also differ in the perspective from which participants are asked to reflect upon the dilemma – and importantly, this is not discussed nor considered in any analyses. In one study that uses the "footbridge dilemma", the agent in this hypothetical situation is another person (i.e., "Joe"; Greene et al.,

2009), while another study employs the same basic paradigm, however here the agent is the participant him or herself (e.g., Cao et al., 2017). Based on our research, it seems plausible that the perspective from which participants are asked to reflect upon the dilemma influences their moral decision.

In addition, while the present research mainly focused on the extent to which perspectives influence peoples' endorsements of moral foundations, the validity of our measurement model shows that the moral foundations approach can also enrich the justice sensitivity literature. Our findings show that people do not merely differ in their perspective-specific sensitivity to (in-) justice but also in their perspective-specific sensitivity to violations of other moral domains. For instance, our last model shows that conservatives seem to be particularly sensitive to people violating their moral ideas regarding authority, loyalty and sanctity and less so to people violating their moral standards of care and fairness. Thus, future research should look at the idea that the extent to which people harbor a self-oriented sensitivity to moral violations varies systematically as a function of the *moral domain*, in which the violation (potentially) occurs.

Limitations and Future Research

Theory synthesis comes along with some caveats. MFT employs a flexible and overlapping conceptualization of “modularity” regarding the moral foundations dimensions (i.e. harm, authority...; Graham et al., 2013, 2018), which is probably exacerbated by the imposition of perspectives. For instance, the victim perspective may in itself represent a violation of the harm foundation – independent of the moral foundation that was violated. “Victimization” typically refers to the objective infliction of harm (i.e., the mirror image of perpetration), and “victimhood” denotes “the psychological experience and consequences of such harm” (Noor et al., 2017, p. 121; see also Vollhardt, 2012, 2020). This might be problematic for our quest to capture perspective-specific sensitivities to certain moral

foundations as the connotation of the perspective could water down the domain-specific meaning of certain violations.

In order to counter this conceptual challenge we had to pay careful attention to the item adaptation process (for an overview of our item-construction principles as well as the adaptation and back-translation process, see supplementary online file). First, we had to replace some of the original MFT items, as the adaptation of some items to a victim-perspective would have unintendedly suggested a violation of the harm foundation. For instance, an original MFT item capturing a violation of the purity foundation reads, “Whether or not someone did something disgusting”. An adaptation to a victim-perspective would result in the item, “Whether or not someone did something disgusting to me”, which directly implies a harmful act. In order to decrease the risk of conflating the purity and the harm foundation, we replaced this item focusing on an aspect of the purity foundation that is better fit to be adapted to a self-oriented perspective without necessarily implying harm⁹. Specifically, we developed the item “Whether or not someone disrespected someone’s (victim: my) religious beliefs”. In so doing, we facilitated the possibility of a perspective-specific adaptation as well as a domain-specific violation (i.e., religious beliefs are particularly prioritized by people who endorse the sanctity foundation; e.g., Graham et al., 2009). While a perspective-specific adaptation of MFT items increases the likelihood of conflating moral foundation dimensions we are still able to investigate whether people systematically differ in their sensitivity to moral violations from a victim or other-oriented perspective – this sensitivity may be harm-based or domain-based (for an overview of this discussion see Beal, 2020). Our model proves that we did succeed in developing less ambiguous items.

⁹ To capture aspects relevant to certain moral foundations we used information provided on www.moralfoundations.org.

Further, we did not achieve model convergence when including the judgment sub-scale. An inspection of the item statistics revealed that 43.3% of judgment items were strongly skewed. This is probably due to the manner in which we adapted the judgment sub-scale. In order to ensure a consistent perspective-specific adaptation, we needed to reformulate original MFQ judgment-items, such as “Respect for authority is something all children should learn” to a description of a social interaction (i.e., perspective-specificity: victim, beneficiary...) that one can judge: “It bothers me, when someone disrespects my authority” (victim-perspective). We assume that this adaptation led to the creation of items that are more conducive to emotional responding. As the relevance sub-scale includes expressions that are more neutral (i.e., “Whether someone showed a lack of respect for my authority”) it makes sense that we did not run into trouble in this sub-scale.

Looking at our political outcome variables, scholars have argued that the liberal-conservative and left-right measures are not interchangeable (Kivikangas, Lönnqvist, & Ravaja, 2017). Our findings show that we do not operationalize a unidimensional “political orientation” construct by testing for political self-identification and voting behavior, which is in line with this argument. Future research should investigate sensitivities to perspective-specific moral foundations using more nuanced tools capturing political ideology and orientation, differentiating for instance between social and economic issues.

Our findings pave the way for several promising research avenues. The validity of our measurement model suggests that people differ systematically in their perspective-specific sensitivity to moral issues. Replications of the current study will be valuable to examine the (cross-cultural) validity and reliability of the Moral Perspectives and Foundations Scale (MPFS). A practical application of these results may allow for more precise predictions of affective, cognitive and behavioral variables. For instance, variance in donation behavior (Nilsson et al., 2016), decisions and behaviors in experimental public goods games (Schier et

al., 2016), attitudes towards climate change (Dickinson et al., 2016) as well as leadership styles, leadership perceptions and behaviors (Egorov et al., 2019; Fehr et al., 2015; Weaver et al., 2014) has been explained by individuals' endorsements of moral foundations. Based on the present findings, these established links may require further investigation. In particular, variance in these outcomes may be better explained by a perspective-specific sensitivity to moral foundations.

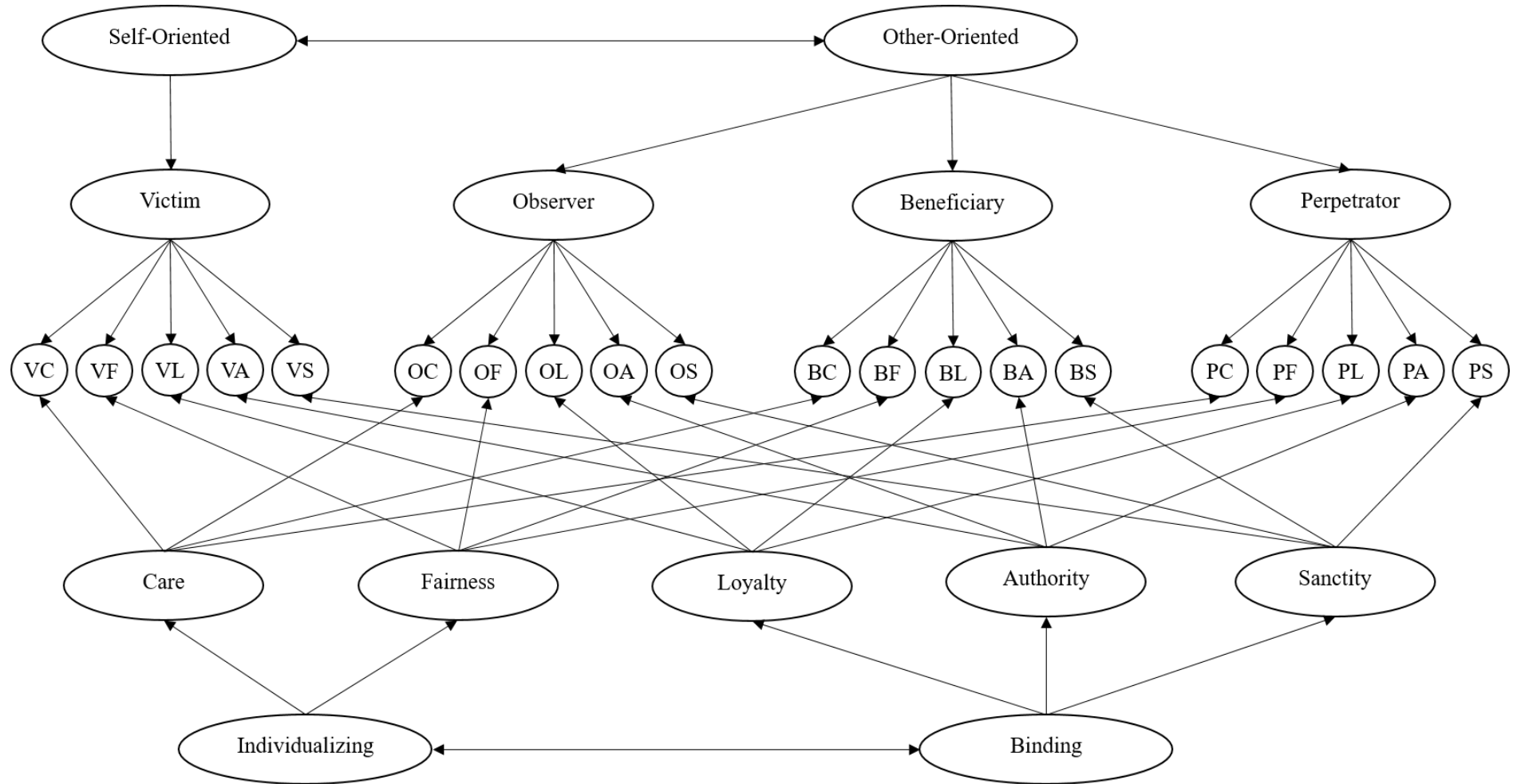


Figure 1. The complete measurement model. First order factors include combinations of perspectives and moral foundations. Second-order factors include four perspectives and five moral foundations. Third-order factors include a self-oriented perspective and an other-oriented perspective as well as individualizing and binding moral foundations.

Table 1

Fit Indices of the Measurement Models

Model	CFI	TLI	SRMR	Model Comparison	
				χ^2	$\Delta\chi^2$ (Δdf)
Model 1 (Moral Foundations × Perspectives)	.906	.893	.071	7927.055	-
Model 2 (Moral Foundations)	.757	.732	.097	19383.139	1210.92* (46)
Model 3 (Perspectives)	.783	.762	.100	17419.426	1190.02* (50)

Note. $N = 2042$. * $p < .001$

Table 2

Descriptive Statistics of and Bivariate Correlations among the Study Variables

Study Variable	N	M	SD	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1. Age	2042	46.45	13.85	-														
2. Gender	2042	-	-	.20*	-													
3. Education	2042	-	-	-.15	.03	-												
4. Victim	2042	3.60	.88	-.01	-.05*	-.08**	-											
5. Observer	2042	3.68	.93	-.01	-.08**	-.04	.83**	-										
6. Beneficiary	2042	3.60	1.13	-.01	-.03	-.03	.59**	.68**	-									
7. Perpetrator	2042	3.88	1.06	-.02	-.09	-.01	.60**	.72**	.74**	-								
8. Care	2042	4.36	.98	-.06**	-.16	.05*	.60**	.68**	.72**	.73**	-							
9. Fairness	2042	4.28	.95	-.06**	-.13	.04	.64**	.69**	.74**	.73**	.85**	-						
10. Loyalty	2042	3.35	1.10	.01	.01	-.09**	.77**	.80**	.72**	.74**	.50**	.55**	-					
11. Authority	2042	3.50	1.03	.04	.00	-.08**	.81**	.84**	.75**	.80**	.55**	.61**	.85**	-				
12. Sanctity	2042	3.26	1.11	-.01	-.07**	-.05*	.70**	.79**	.76**	.76**	.56**	.55**	.67**	.69**	-			
13. Political Identification	1929	3.69	1.28	.04	.11**	-.07**	.19**	.07**	.02	.00	-.12**	-.05*	.22**	.20**	.01	-		
14. Voting	1996	3.38	1.56	.01	.07**	-.10**	.17**	.07**	.04	.02	-.09**	-.03	.21**	.17**	.03	.60**	-	
15. Anti-Immigration	2042	3.21	1.48	.11**	.01	-.22**	.32**	.16**	.07**	.03	-.07**	.01	.31**	.28**	.06**	.50**	.49**	-

Note. Study variables are standardized. Gender (1: Female; 2: Male). Education (1: No high school; 2: High school; 3: Academic degree). Political self-identification (1: left-wing – 7: right-wing); Voting (1: Die Linke; 2: Bündnis 90/Die Grünen; 3: SPD; 4: CDU; 5: FDP; 6: AfD). All other scales ranged from 1-6.

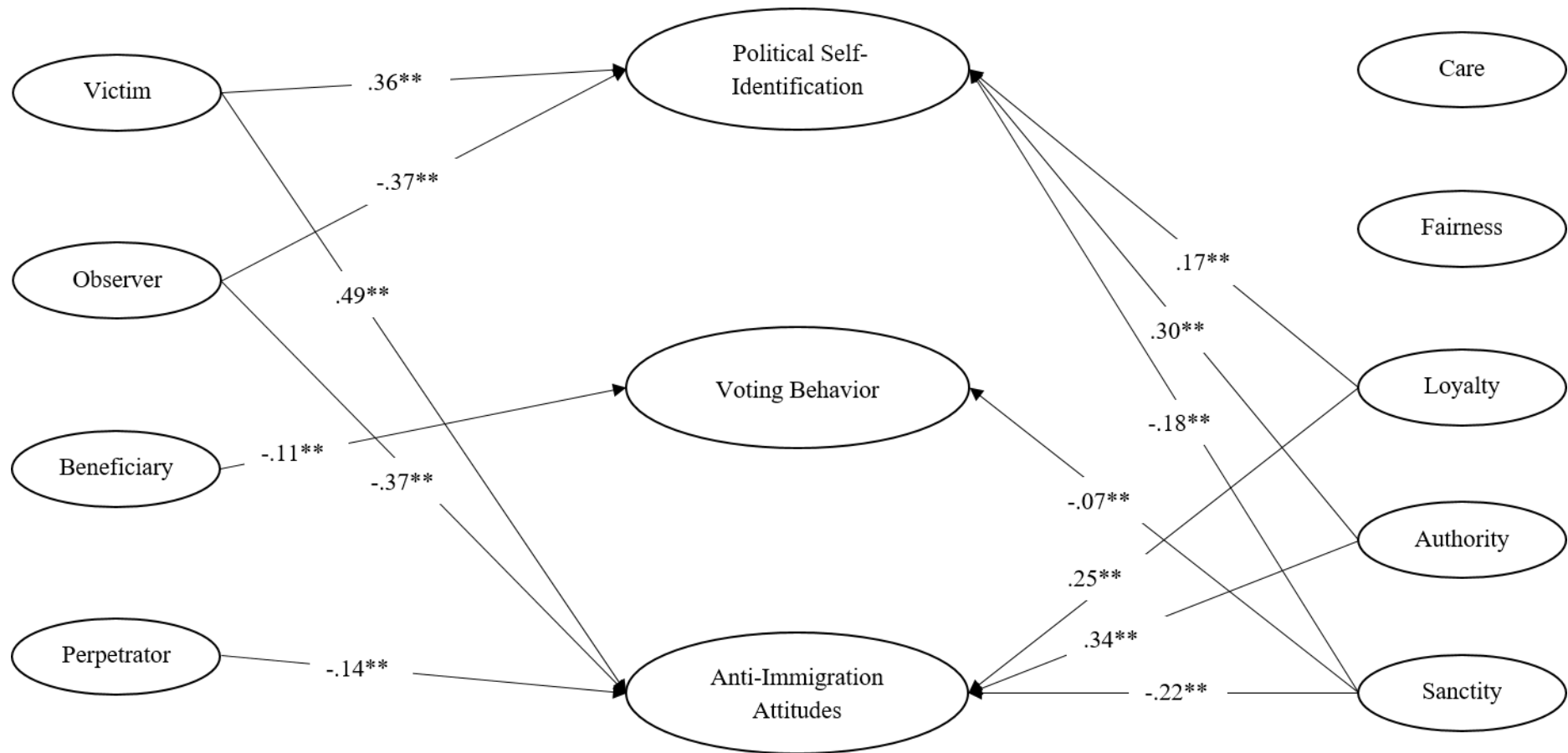


Figure 2. Associations (standardized estimates) of second-order factors (Perspectives and moral foundations) with dependent variables.

* $p < .05$ ** $p < .01$.

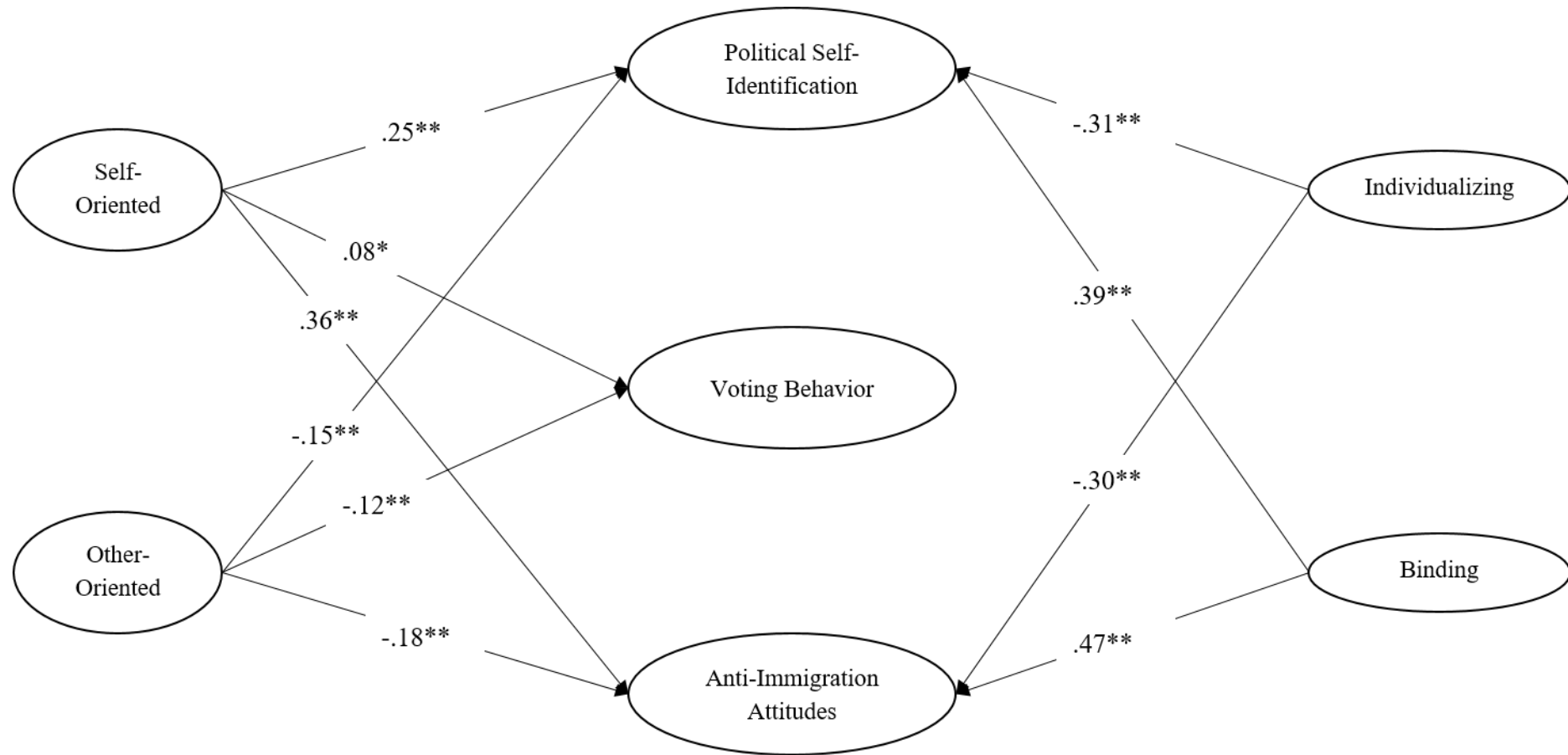


Figure 3. Associations (standardized estimates) of third-order factors (self- and other-oriented perspectives; Individualizing and binding moral foundations) with dependent variables. $*p < .05$ $**p < .01$.

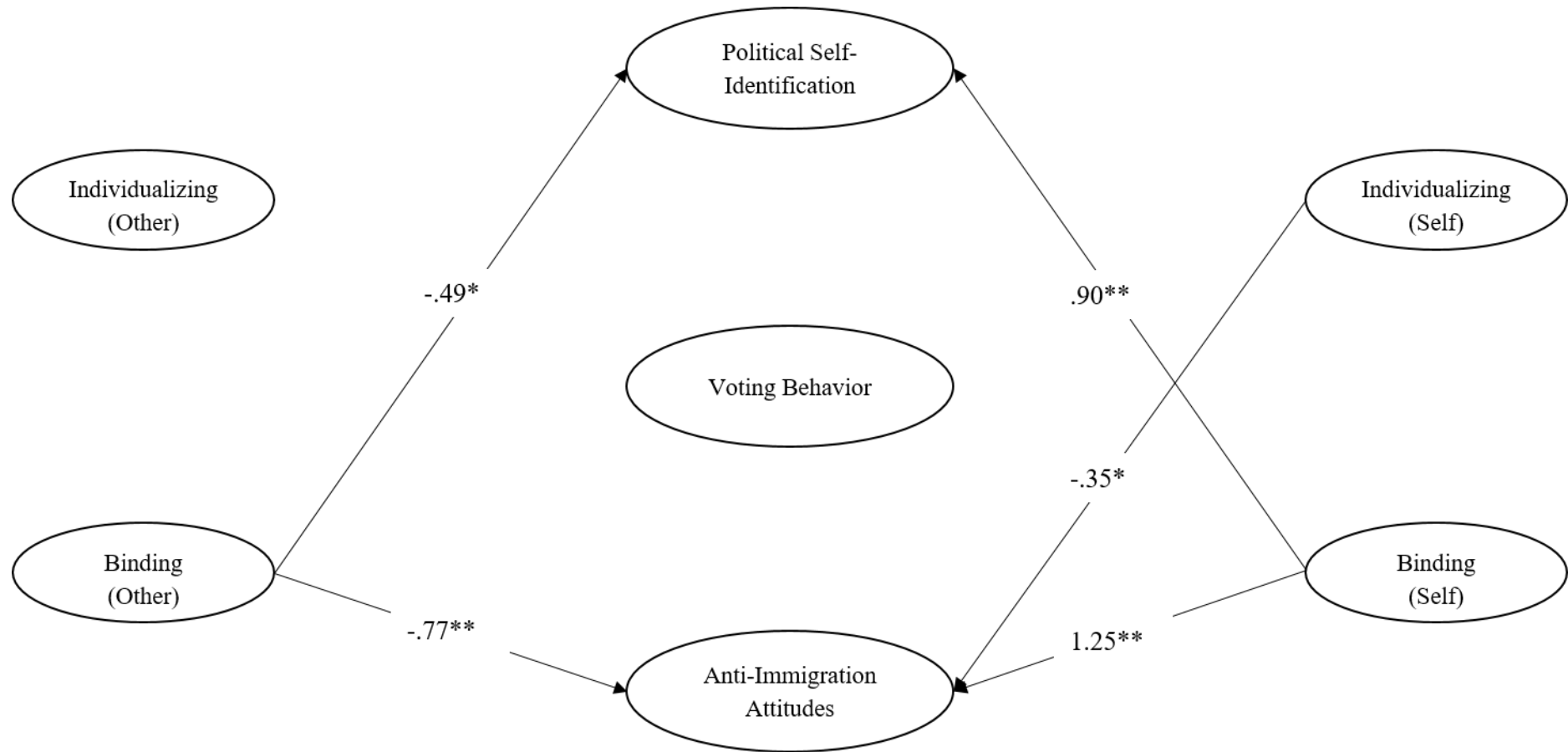


Figure 4. Associations (standardized estimates) of combinations of third-order factors (individualizing and binding moral foundations from self- and other-oriented perspectives) with dependent variables. * $p < .05$ ** $p < .01$.

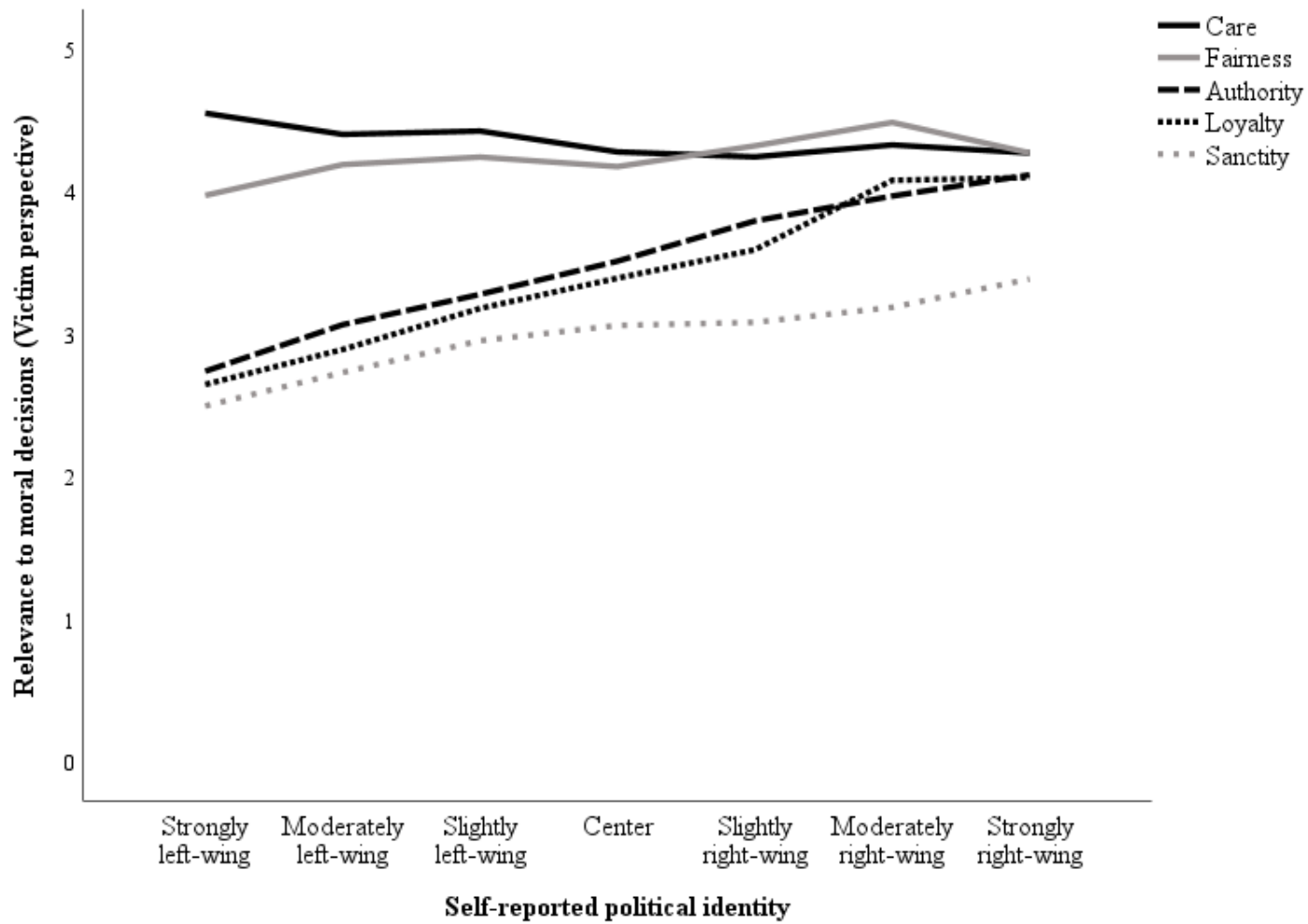


Figure 5. Victim perspective: Relevance of moral foundations across political identity.

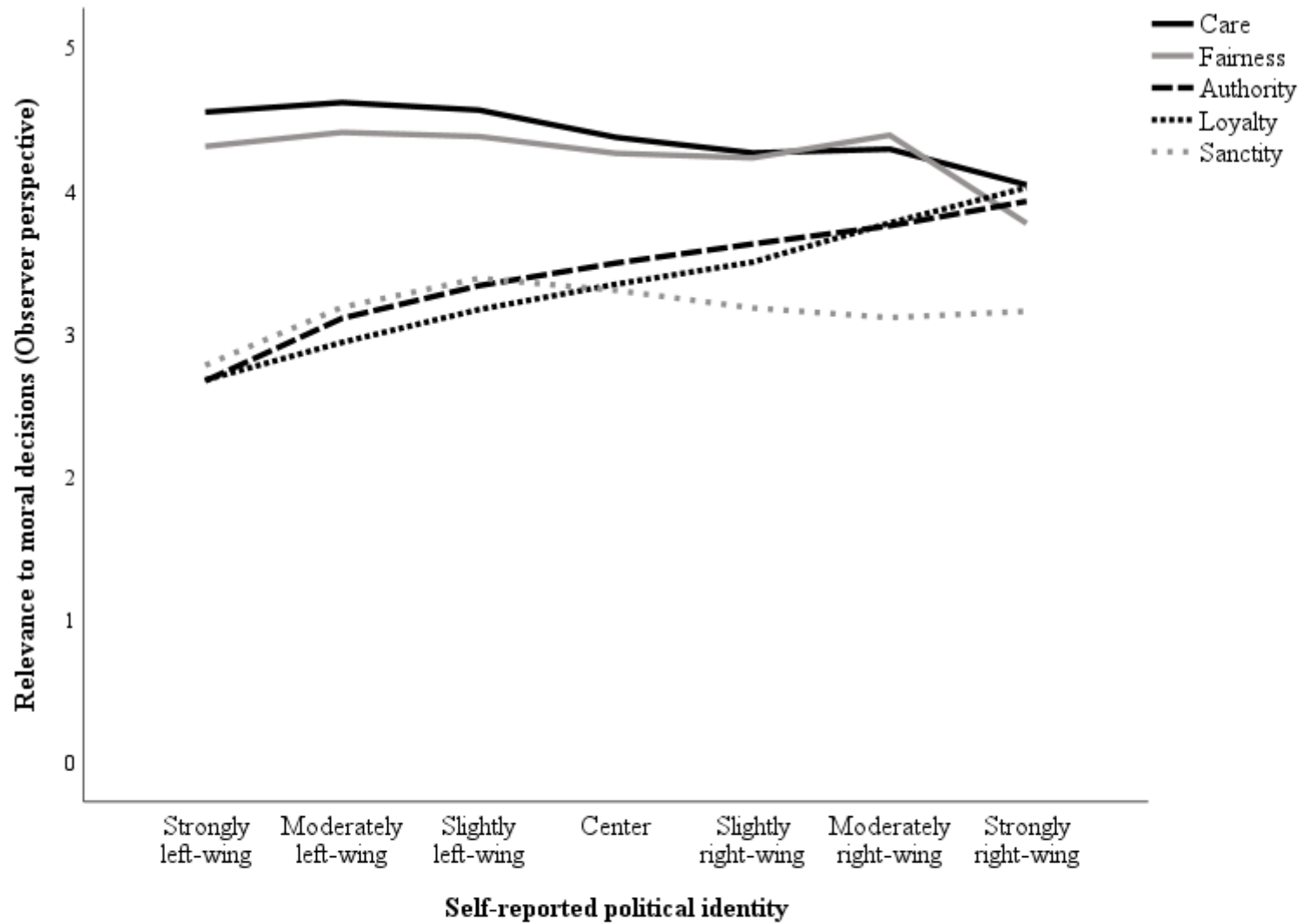


Figure 6. Observer perspective: Relevance of moral foundations across political identity.

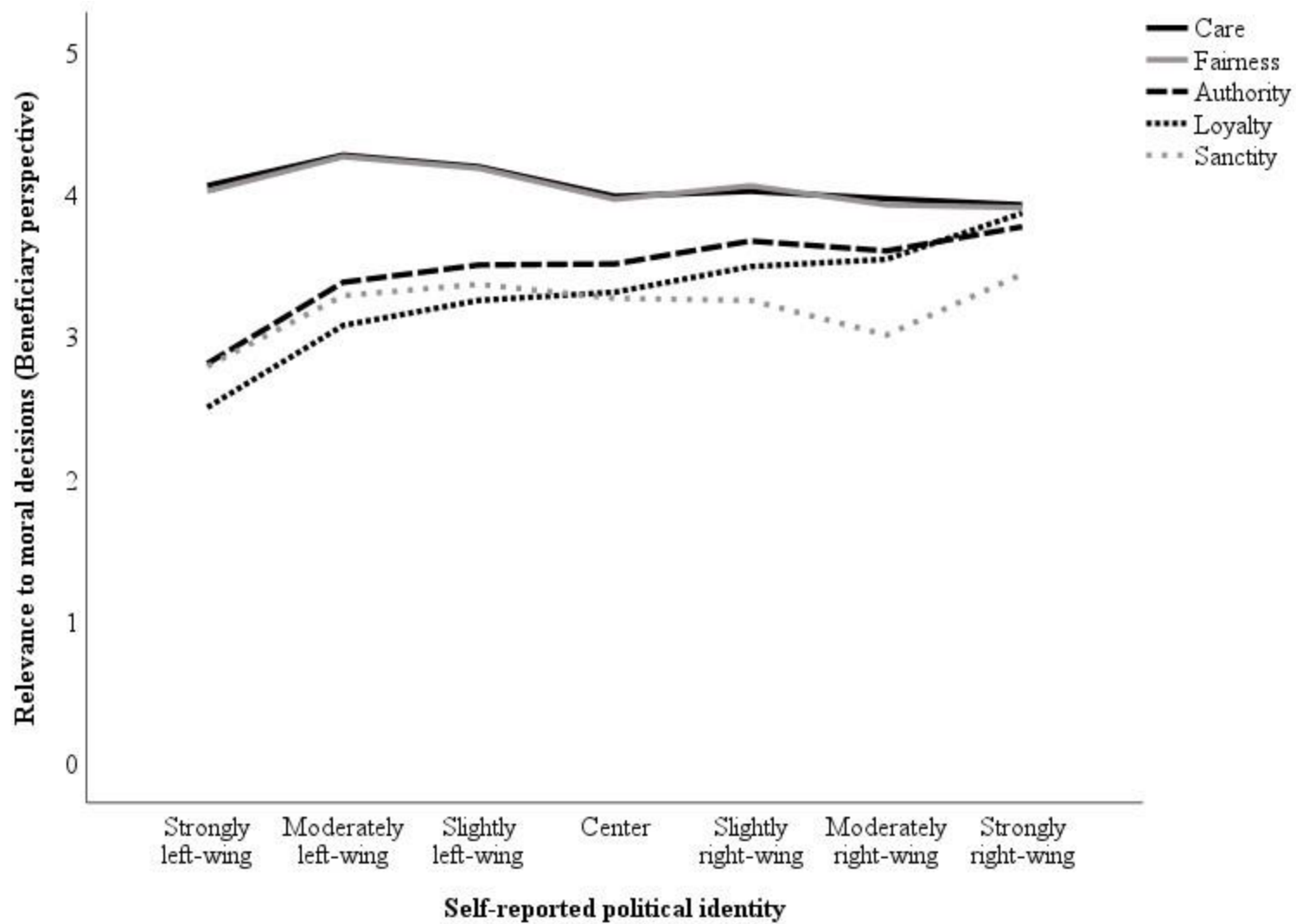


Figure 7. Beneficiary perspective: Relevance of moral foundations across political identity.

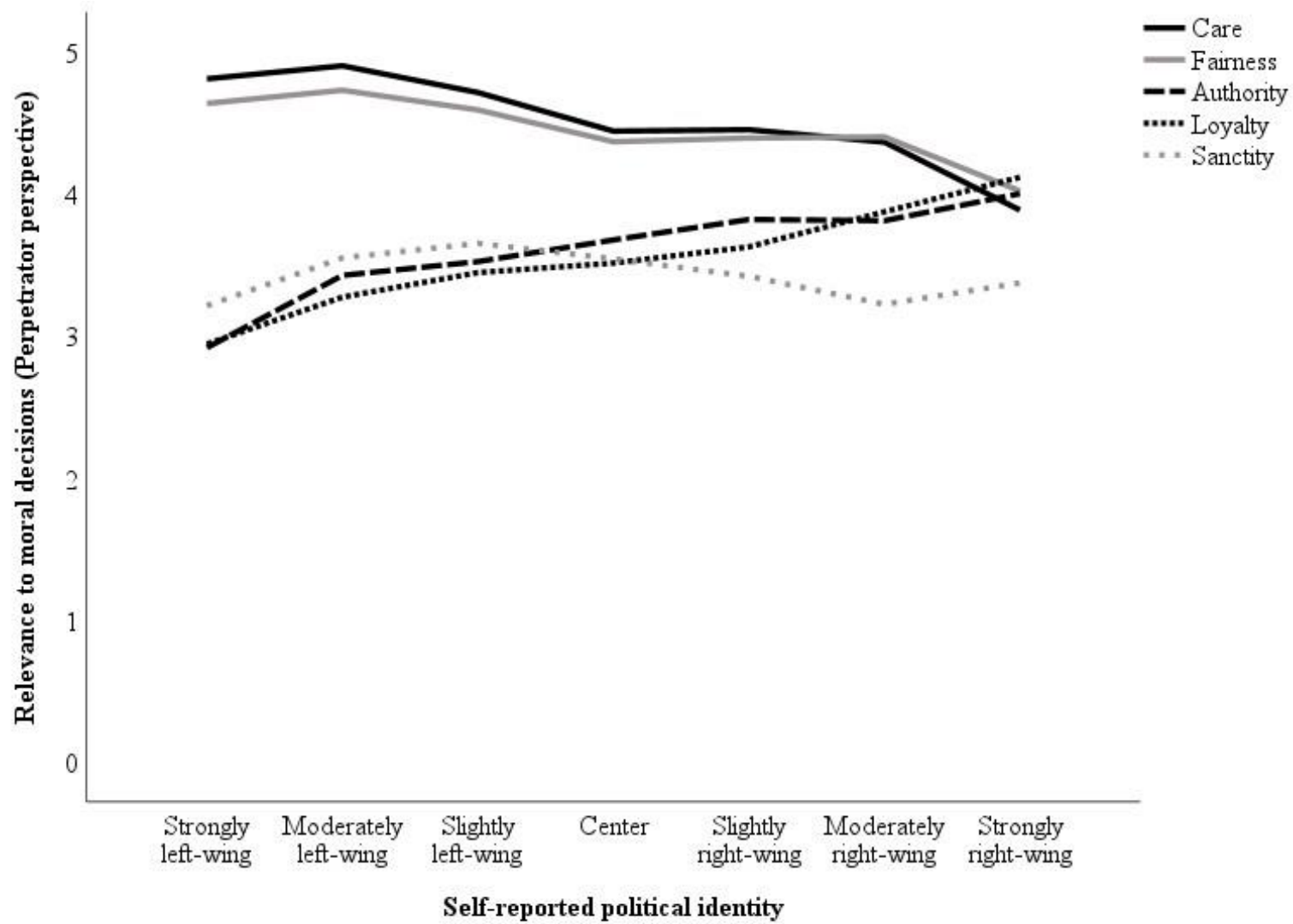


Figure 8. Perpetrator perspective: Relevance of moral foundations across political identity.

References

- Baumert, A., Beierlein, C., Schmitt, M., Kemper, C. J., Kovaleva, A., Liebig, S., & Rammstedt, B. (2014). Measuring four perspectives of justice sensitivity with two items each. *Journal of Personality Assessment*, *96*(3), 380–390.
<https://doi.org/10.1080/00223891.2013.836526>
- Baumert, A., & Schmitt, M. (2016). Justice sensitivity. In C. Sabbagh & M. Schmitt (Hrsg.), *Handbook of Social Justice Theory and Research* (S. 161–180). Springer.
https://doi.org/10.1007/978-1-4939-3216-0_9
- Beal, B. (2020). What are the irreducible basic elements of morality? A critique of the debate over monism and pluralism in moral psychology. *Perspectives on Psychological Science*, *15*(2), 273–290. <https://doi.org/10.1177/1745691619867106>
- Bierbrauer, G., & Klinger, E. W. (2002). Political ideology, perceived threat, and justice towards immigrants. *Social Justice Research*, *15*(1), 41–52.
<https://doi.org/10.1023/A:1016045731732>
- Cao, F., Zhang, J., Song, L., Wang, S., Miao, D., & Peng, J. (2017). Framing effect in the trolley problem and footbridge dilemma: Number of saved lives matters. *Psychological Reports*, *120*(1), 88–101. <https://doi.org/10.1177/0033294116685866>
- Clifford, S., Iyengar, V., Cabeza, R., & Sinnott-Armstrong, W. (2015). Moral foundations vignettes: A standardized stimulus database of scenarios based on moral foundations theory. *Behavior Research Methods*, *47*(4), 1178–1198.
<https://doi.org/10.3758/s13428-014-0551-2>
- Cushman, F., Young, L., & Hauser, M. (2006). The role of conscious reasoning and intuition in moral judgment: Testing three principles of harm. *Psychological Science*, *17*(12), 1082–1089. <https://doi.org/10.1111/j.1467-9280.2006.01834.x>

- Dar, Y., & Resh, N. (2001). Exploring the multifaceted structure of sense of deprivation. *European Journal of Social Psychology, 31*(1), 63–81. <https://doi.org/10.1002/ejsp.32>
- Destatis (2020). Bevölkerung im Alter von 15 Jahren und mehr nach allgemeinen und beruflichen Bildungsabschlüssen nach Jahren. Retrieved from <https://www.destatis.de/DE/Themen/Gesellschaft-Umwelt/Bildung-Forschung-Kultur/Bildungsstand/Tabellen/bildungsabschluss.html#fussnote-8-104098>
- Di Battista, S., Pivetti, M., & Berti, C. (2018). Moral foundations, political orientation and religiosity in Italy. *The Open Psychology Journal, 11*(1). <https://doi.org/10.2174/1874350101811010046>
- Dickinson, J. L., McLeod, P., Bloomfield, R., & Allred, S. (2016). Which moral foundations predict willingness to make lifestyle changes to avert climate change in the USA? *PLOS ONE, 11*(10), e0163852. <https://doi.org/10.1371/journal.pone.0163852>
- Dimap, I. (2016). Sonntagsfrage (bundesweit). Retrieved from <http://www.infratest-dimap.de/umfragenanalysen/bundesweit/sonntagsfrage>.
- Egorov, M., Pircher Verdorfer, A., & Peus, C. (2019). Taming the emotional dog: Moral intuition and ethically-oriented leader development. *Journal of Business Ethics, 160*(3), 817–834. <https://doi.org/10.1007/s10551-018-3876-4>
- Emler, N., Renwick, S., & Malone, B. (1983). The relationship between moral reasoning and political orientation. *Journal of Personality and Social Psychology, 45*(5), 1073–1080. <https://doi.org/10.1037/0022-3514.45.5.1073>
- ESS Round 9: European Social Survey Round 9 Data (2018). Data file edition 3.1. Sikt - Norwegian Agency for Shared Services in Education and Research, Norway – Data Archive and distributor of ESS data for ESS ERIC. doi:10.21338/NSD-ESS9-2018.

- Fehr, R., Yam, K. C. (Sam), & Dang, C. (2015). Moralized leadership: The construction and consequences of ethical leader perceptions. *Academy of Management Review*, *40*(2), 182–209. <https://doi.org/10.5465/amr.2013.0358>
- Foot, P. (1978). “The problem of abortion and the doctrine of the double effect” in: *Virtues and Vices*. Basil Blackwell, Oxford.
- Gollwitzer, M., Rothmund, T., & Süßenbach, P. (2013). The sensitivity to mean intentions (SeMI) model: Basic assumptions, recent findings, and potential avenues for future research. *Social and Personality Psychology Compass*, *7*(7), 415–426. <https://doi.org/10.1111/spc3.12041>
- Gollwitzer, M., Schmitt, M., Schalke, R., Maes, J., & Baer, A. (2005). Asymmetrical effects of justice sensitivity perspectives on prosocial and antisocial behavior. *Social Justice Research*, *18*(2), 183–201. <https://doi.org/10.1007/s11211-005-7368-1>
- Graham, J., & Haidt, J. (2012). Sacred values and evil adversaries: A moral foundations approach. In *The social psychology of morality: Exploring the causes of good and evil* (S. 11–31). American Psychological Association. <https://doi.org/10.1037/13091-001>
- Graham, J., Haidt, J., Koleva, S., Motyl, M., Iyer, R., Wojcik, S. P., & Ditto, P. H. (2013). Chapter two - Moral foundations theory: The pragmatic validity of moral pluralism. In P. Devine & A. Plant (Hrsg.), *Advances in Experimental Social Psychology* (Bd. 47, S. 55–130). Academic Press. <https://doi.org/10.1016/B978-0-12-407236-7.00002-4>
- Graham, J., Haidt, J., Motyl, M., Meindl, P., Iskiwitch, C., & Mooijman, M. (2018). Moral foundations theory: On the advantages of moral pluralism over moral monism. In *Atlas of moral psychology* (S. 211–222). The Guilford Press.

- Graham, J., Haidt, J., & Nosek, B. A. (2009). Liberals and conservatives rely on different sets of moral foundations. *Journal of Personality and Social Psychology*, *96*(5), 1029–1046. <https://doi.org/10.1037/a0015141>
- Graham, J., Nosek, B. A., Haidt, J., Iyer, R., Koleva, S., & Ditto, P. H. (2011). Mapping the moral domain. *Journal of Personality and Social Psychology*, *101*(2), 366–385. <https://doi.org/10.1037/a0021847>
- Gray, K., Schein, C., & Ward, A. F. (2014). The myth of harmless wrongs in moral cognition: Automatic dyadic completion from sin to suffering. *Journal of Experimental Psychology: General*, *143*(4), 1600–1615. <https://doi.org/10.1037/a0036149>
- Greene, J. D., Cushman, F. A., Stewart, L. E., Lowenberg, K., Nystrom, L. E., & Cohen, J. D. (2009). Pushing moral buttons: The interaction between personal force and intention in moral judgment. *Cognition*, *111*(3), 364–371. <https://doi.org/10.1016/j.cognition.2009.02.001>
- Greene, J. D., Sommerville, R. B., Nystrom, L. E., Darley, J. M., & Cohen, J. D. (2001). An fMRI investigation of emotional engagement in moral judgment. *Science*, *293*(5537), 2105–2108. <https://doi.org/10.1126/science.1062872>
- Hadarics, M., & Kende, A. (2021). Politics turns moral foundations into consequences of intergroup attitudes. *Social Psychology*, *52*(3), 185–196. <https://doi.org/10.1027/1864-9335/a000447>
- Haidt, J. (2012). *The righteous mind: Why good people are divided by politics and religion*. Knopf Doubleday Publishing Group.
- Haidt, J. (2013). Moral psychology for the twenty-first century. *Journal of Moral Education*, *42*(3), 281–297. <https://doi.org/10.1080/03057240.2013.817327>

- Haidt, J., & Graham, J. (2007). When morality opposes justice: Conservatives have moral intuitions that liberals may not recognize. *Social Justice Research*, *20*(1), 98–116. <https://doi.org/10.1007/s11211-007-0034-z>
- Haidt, J., & Joseph, C. (2004). Intuitive ethics: How innately prepared intuitions generate culturally variable virtues. *Daedalus*, *133*(4), 55–66. <https://doi.org/10.1162/0011526042365555>
- Haidt, J., & Joseph, C. (2008). The moral mind: How five sets of innate intuitions guide the development of many culture-specific virtues, and perhaps even modules. In *The innate mind Volume 3: Foundations and the future* (S. 367–391). Oxford University Press. <https://doi.org/10.1093/acprof:oso/9780195332834.003.0019>
- Hair, J., Hult, G. T. M., Ringle, C., & Sarstedt, M. (2014). *A Primer on Partial Least Squares Structural Equation Modeling*.
- Hester, N., & Gray, K. (2020). The Moral Psychology of Raceless, Genderless Strangers. *Perspectives on Psychological Science*, *15*(2), 216–230. <https://doi.org/10.1177/1745691619885840>
- Huseman, R. C., Hatfield, J. D., & Miles, E. W. (1987). A new perspective on equity theory: The equity sensitivity construct. *The Academy of Management Review*, *12*(2), 222–234. <https://doi.org/10.2307/258531>
- Jahnke, S., Schröder, C. P., Goede, L.-R., Lehmann, L., Hauff, L., & Beelmann, A. (2020). Observer sensitivity and early radicalization to violence among young people in Germany. *Social Justice Research*. <https://doi.org/10.1007/s11211-020-00351-y>
- Ji, Q., & Janicke, S. H. (2018). Culture, political orientation, and moral foundations: A comparison between China and the U.S. *China Media Research*, *14*(1), 62–75.

- Jones, K. L., Noorbaloochi, S., Jost, J. T., Bonneau, R., Nagler, J., & Tucker, J. A. (2018). Liberal and conservative values: What we can learn from congressional tweets. *Political Psychology, 39*(2), 423–443. <https://doi.org/10.1111/pops.12415>
- Jost, J. T., Sterling, J., & Stern, C. (2017). Getting closure on conservatism, or the politics of epistemic and existential motivation. In *The Motivation-Cognition Interface*. Routledge.
- Kim, K. R., Kang, J.-S., & Yun, S. (2012). Moral intuitions and political orientation: Similarities and differences between South Korea and the United States. *Psychological Reports, 111*(1), 173–185. <https://doi.org/10.2466/17.09.21.PR0.111.4.173-185>
- Kivikangas, J. M., Fernández-Castilla, B., Järvelä, S., Ravaja, N., & Lönnqvist, J.-E. (2021). *Moral Foundations and Political Orientation: Systematic Review and Meta-Analysis*. PsyArXiv. <https://doi.org/10.31234/osf.io/b64rc>
- Kivikangas, J. M., Lönnqvist, J.-E., & Ravaja, N. (2017). Relationship of moral foundations to political liberalism-conservatism and left-right orientation in a Finnish representative sample. *Social Psychology, 48*(4), 246–251. <https://doi.org/10.1027/1864-9335/a000297>
- Koleva, S. P., Graham, J., Iyer, R., Ditto, P. H., & Haidt, J. (2012). Tracing the threads: How five moral concerns (especially purity) help explain culture war attitudes. *Journal of Research in Personality, 46*(2), 184–194. <https://doi.org/10.1016/j.jrp.2012.01.006>
- Kugler, M., Jost, J., & Noorbaloochi, S. (2014). Another Look at moral foundations theory: Do authoritarianism and social dominance orientation explain liberal-conservative differences in “moral” intuitions? *Social Justice Research, 27*, 413–431. <https://doi.org/10.1007/s11211-014-0223-5>

- Lovas, L., & Wolt, R. (2002). Sensitivity to injustice in the context of some personality traits. *Studia Psychologica, 44*, 125–131.
- Maltese, S., Baumert, A., Schmitt, M. J., & MacLeod, C. (2016). How victim sensitivity leads to uncooperative behavior via expectancies of injustice. *Frontiers in Psychology, 6*.
<https://www.frontiersin.org/article/10.3389/fpsyg.2015.02059>
- Mikula, G., Petri, B., & Tanzer, N. (1990). What people regard as unjust: Types and structures of everyday experiences of injustice. *European Journal of Social Psychology, 20*(2), 133–149. <https://doi.org/10.1002/ejsp.2420200205>
- Miles, A., & Vaisey, S. (2015). Morality and politics: Comparing alternate theories. *Social Science Research, 53*, 252–269. <https://doi.org/10.1016/j.ssresearch.2015.06.002>
- Milesi, P. (2016). Moral foundations and political attitudes: The moderating role of political sophistication. *International Journal of Psychology, 51*(4), 252–260.
<https://doi.org/10.1002/ijop.12158>
- Mohiyeddini, C., & Schmitt, M. J. (1997). Sensitivity to befallen injustice and reactions to unfair treatment in a laboratory situation. *Social Justice Research, 10*(3), 333–353.
<https://doi.org/10.1007/BF02683307>
- Muthén, L. K., & Muthén, B. O. (1998-2018). Mplus User's Guide. Eighth Edition. Los Angeles, CA: Muthén & Muthén.
- Napier, J. L., & Luguri, J. B. (2013). Moral mind-sets: Abstract thinking increases a preference for “individualizing” Over “binding” moral foundations. *Social Psychological and Personality Science, 4*(6), 754–759.
<https://doi.org/10.1177/1948550612473783>

- Nilsson, A., & Erlandsson, A. (2015). The moral foundations taxonomy: Structural validity and relation to political ideology in Sweden. *Personality and Individual Differences*, 76, 28–32. <https://doi.org/10.1016/j.paid.2014.11.049>
- Nilsson, A., Erlandsson, A., & Västfjäll, D. (2016). The congruency between moral foundations and intentions to donate, self-reported donations, and actual donations to charity. *Journal of Research in Personality*, 65, 22–29. <https://doi.org/10.1016/j.jrp.2016.07.001>
- Noor, M., Vollhardt, J. R., Mari, S., & Nadler, A. (2017). The social psychology of collective victimhood. *European Journal of Social Psychology*, 47(2), 121–134. <https://doi.org/10.1002/ejsp.2300>
- Rothmund, T., Bromme, L., & Azevedo, F. (2020). Justice for the people? How justice sensitivity can foster and impair support for populist radical-right parties and politicians in the United States and in Germany. *Political Psychology*, 41(3), 479–497. <https://doi.org/10.1111/pops.12632>
- Rothmund, T., C. Becker, J., & Jost, J. (2016). *The psychology of social justice in political thought and action* (S. 275–291). https://doi.org/10.1007/978-1-4939-3216-0_15
- Rothmund, T., Stavrova, O., & Schlösser, T. (2017). Justice concerns can feed nationalistic concerns and impede solidarity in the euro crisis: How victim sensitivity translates into political attitudes. *Social Justice Research*, 30(1), 48–71. <https://doi.org/10.1007/s11211-017-0280-7>
- Schein, C., & Gray, K. (2015). The unifying moral dyad: Liberals and conservatives share the same harm-based moral template. *Personality and Social Psychology Bulletin*, 41(8), 1147–1163. <https://doi.org/10.1177/0146167215591501>

- Schein, C., & Gray, K. (2018). The theory of dyadic morality: Reinventing moral judgment by redefining harm. *Personality and Social Psychology Review*, 22(1), 32–70.
<https://doi.org/10.1177/1088868317698288>
- Schier, U. K., Ockenfels, A., & Hofmann, W. (2016). Moral values and increasing stakes in a dictator game. *Journal of Economic Psychology*, 56, 107–115.
<https://doi.org/10.1016/j.joep.2016.06.004>
- Schmitt, M. (1996). Individual differences in sensitivity to befallen injustice (SBI). *Personality and Individual Differences*, 21(1), 3–20. [https://doi.org/10.1016/0191-8869\(96\)00028-1](https://doi.org/10.1016/0191-8869(96)00028-1)
- Schmitt, M., Baumert, A., Gollwitzer, M., & Maes, J. (2010). The justice sensitivity inventory: Factorial validity, location in the personality facet space, demographic pattern, and normative data. *Social Justice Research*, 23(2), 211–238.
<https://doi.org/10.1007/s11211-010-0115-2>
- Schmitt, M., & Dörfel, M. (1999). Procedural injustice at work, justice sensitivity, job satisfaction and psychosomatic well-being. *European Journal of Social Psychology*, 29(4), 443–453. [https://doi.org/10.1002/\(SICI\)1099-0992\(199906\)29:4<443::AID-EJSP935>3.0.CO;2-C](https://doi.org/10.1002/(SICI)1099-0992(199906)29:4<443::AID-EJSP935>3.0.CO;2-C)
- Schmitt, M., Gollwitzer, M., Maes, J., & Arbach, D. (2005). Justice sensitivity. *European Journal of Psychological Assessment*, 21(3), 202–211. <https://doi.org/10.1027/1015-5759.21.3.202>
- Stavrova, O., & Schlösser, T. (2015). Solidarity and social justice: Effect of individual differences in justice sensitivity on solidarity behaviour. *European Journal of Personality*, 29(1), 2–16. <https://doi.org/10.1002/per.1981>

- Süssenbach, P., & Gollwitzer, M. (2015). Us(ed): The role of victim sensitivity in potentially exploitative intergroup relationships. *Group Processes & Intergroup Relations*, *18*(2), 241–255. <https://doi.org/10.1177/1368430214556700>
- Tamul, D., Elson, M., Ivory, J. D., Hotter, J. C., Lanier, M., Wolf, J., & Martínez-Carrillo, N. I. (2020). *Moral foundations' methodological foundations: A systematic analysis of reliability in research using the moral foundations questionnaire*. PsyArXiv. <https://doi.org/10.31234/osf.io/shcgv>
- Thomson, J. (1985). The trolley problem. *Yale Law Journal* *94*(6), 1395–1415.
- van den Bos, K., Maas, M., Waldring, I. E., & Semin, G. R. (2003). Toward understanding the psychology of reactions to perceived fairness: The role of affect intensity. *Social Justice Research*, *16*(2), 151–168. <https://doi.org/10.1023/A:1024252104717>
- van Leeuwen, F., & Park, J. H. (2009). Perceptions of social dangers, moral foundations, and political orientation. *Personality and Individual Differences*, *47*(3), 169–173. <https://doi.org/10.1016/j.paid.2009.02.017>
- Vecina, M. (2014). The five moral foundations sacredness scale in men in court-mandated treatment for violently abusing their partners. *Personality and Individual Differences*, *64*, 46–51. <https://doi.org/10.1016/j.paid.2014.02.021>
- Voelkel, J. G., & Brandt, M. J. (2019). The Effect of Ideological Identification on the Endorsement of Moral Values Depends on the Target Group. *Personality and Social Psychology Bulletin*, *45*(6), 851–863. <https://doi.org/10.1177/0146167218798822>
- Vollhardt, J. R. (2012). Collective victimization. In *The Oxford handbook of intergroup conflict* (S. 136–157). Oxford University Press.
- Vollhardt, J. R. (2020). *The social psychology of collective victimhood*. Oxford University Press.

- Waytz, A., Iyer, R., Young, L., & Graham, J. (2016). Ideological differences in the expanse of empathy. In *Social psychology of political polarization* (S. 61–77). Routledge/Taylor & Francis Group.
- Waytz, A., Iyer, R., Young, L., Haidt, J., & Graham, J. (2019). Ideological differences in the expanse of the moral circle. *Nature Communications*, *10*(1), Art. 1.
<https://doi.org/10.1038/s41467-019-12227-0>
- Weaver, G. R., Reynolds, S. J., & Brown, M. E. (2014). Moral intuition: Connecting current knowledge to future organizational research and practice. *Journal of Management*, *40*(1), 100–129. <https://doi.org/10.1177/0149206313511272>
- Yalçındağ, B., Özkan, T., Cesur, S., Yılmaz, O., Tepe, B., Piyale, Z. E., Biten, A. F., & Sunar, D. (2019). An investigation of moral foundations theory in Turkey using different measures. *Current Psychology*, *38*(2), 440–457. <https://doi.org/10.1007/s12144-017-9618-4>

7. Manuscript 2: Victim Sensitivity and Anti-Immigration Attitudes & Behaviour

Title: How Victim Sensitivity affects our Attitudes and Behaviour towards Immigrants

Short title: *Victim Sensitivity and Immigration*

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Data availability statement:

The data that support the findings of these studies are openly available in the Open Science

Framework at <https://osf.io/x9mp5/>

Abstract

Three studies explore the relation between victim sensitivity – the sensitivity to being a victim of injustice – and anti-immigration attitudes and behaviour. Based on theoretical considerations and prior research, we hypothesized that victim sensitivity positively predicts anti-immigration attitudes and behaviour over and above political orientation and ideology. Results from a longitudinal study (Study 1; $N = 1,038$), a computerized online-experiment (Study 2; $N = 299$), and a laboratory experiment (Study 3; $N = 178$) provide support for this hypothesis. Studies 2 and 3 indicate that a heightened fear of exploitation mediates the effect of victim sensitivity on anti-immigration attitudes and behaviour even though attempts to scrutinize this mechanism by “switching off” the psychological process were unsuccessful. We discuss methodological and theoretical implications and possible avenues for future research.

Keywords: Victim sensitivity, justice sensitivity, anti-immigration attitudes, exploitation, anti-social behaviour

Introduction

Displaced populations in countries around the world have grown, and so has an extensive literature on ‘host’ populations’ attitudes towards immigration. Research shows that anti-immigration sentiments have played a key role in the increase of right-wing radicalization since the onset of the Refugee Crisis in 2015 (Winograd, 2021). Anti-immigration attitudes can be defined as a tendency to respond in a consistently unfavourable manner with respect to immigration (EduNet, 2021). Empirically, past research has distinguished between attitudes concerning the process of immigration (e.g., Billiet & Meuleman, 2012) and perceptions of immigrants as a social category (e.g., Esses, Jackson, & Armstrong, 1998). Both attitudes towards the process of immigration as well as perceptions of immigrants are highly relevant for a successful integration of immigrants into host communities (e.g., Canetti, Snider, Pedersen, & Hall, 2016; Esses, 2021; Facchini & Mayda, 2008).

Antecedents of anti-immigration attitudes range from xenophobia and racism (e.g., Billiet & de Witte, 2008; Jolly & DiGiusto, 2014) to ideological attitudes, such as Right-Wing Authoritarianism (RWA) or fundamental social beliefs, such as Social Dominance Orientation (SDO; Thomsen, Green, & Sidanius, 2008). Research also indicates that perceptions of justice and fairness influence people’s attitudes towards immigrants and immigration. Different perceptions of justice come into play when people expect competition with immigrants. For instance, members of host communities may perceive immigrants negatively due to the feeling that their in-group is unfairly deprived of desirable goods in comparison to the immigrant population (e.g., Jetten, Mols, & Postmes, 2015; Meuleman et al., 2020) – a perception that has been referred to as “Group Relative Deprivation” (GRD; Pettigrew et al., 2008). In addition, this perception is also associated with “zero-sum thinking”, that is, the belief that one party’s gains can only be obtained at the expense of another party’s losses – a belief that is also related to anti-

immigration attitudes (Davidai & Ongis, 2019; Ongis & Davidai, 2021).

The relation between relative deprivation and anti-immigration attitudes is closely associated with perceptions of economic conditions and assumptions regarding distributions of public resources. As the concept of Group Relative Deprivation is based on the premise that the in-group is *unfairly* disadvantaged, the extent to which unfair resource distributions are expected should influence perceived relative deprivation and subsequently negative perceptions of competing out-groups, such as immigrants. Perceived disadvantage can follow from an ostensibly unfair “system” (“my piece of cake will be smaller when immigrants get a piece”; Ongis & Davidai, 2021). Another possibility is that the perceived disadvantage can be a consequence of the target group’s unfair behaviour in the system (“my piece of the cake will be smaller because immigrants don’t contribute to the size of the cake”). In economic research, the latter explanation is also referred to as the “free-rider problem”: the notion that “free-riders” may contribute little or nothing toward the cost of a public good, while enjoying its benefits as fully as any other member of the group (Kim & Walker, 1984).

People are motivated to detect “free-riders;” their evaluation of and behaviour towards another party in a social exchange situation largely depends on the extent to which they think that this party is “free-riding” (Cosmides & Tooby, 2015; Fehr & Gächter, 2000). In the immigration context, people evaluate whether immigrants ‘deserve’ favourable treatment based on the perceived effort to benefit the public good. In line with this, citizens are inclined to impede immigrants’ access to social welfare if they suspect that immigrants receive more from the welfare state than they contribute to it (De Koster, Achterberg, & Van der Waal, 2013; Reeskens & Van de Meer, 2019; Reeskens & Van Oorschot, 2012). Notably, it makes a strong difference whether a party does not contribute to a public good because of a lack of competence, contextual factors, or bad luck or whether the “free-rider” is intentionally avoiding productive effort to

benefit unilaterally from the public good – a behaviour termed “parasitic strategy” (Petersen, Sznycer, Cosmides, & Tooby, 2012). In order to identify individuals harbouring parasitic strategies, people pay particular attention to the target’s motivation to take part in the system of social exchange (Cosmides, Barrett, & Tooby, 2010; Delton, Cosmides, Guemo, Robertson, & Tooby, 2012). Detecting parasitic strategies triggers anger – an emotion associated with defensive reactions against exploitation (e.g., Sell, Tooby, & Cosmides, 2009) and uncooperative behaviour towards the target person or group independent of the perceivers’ political ideology (e.g., Petersen et al., 2012). As such, being sensitive to free-riding is evolutionarily adaptive: it shields a group from a loss of status and material resources and it fosters group norms and group members’ willingness to cooperate within the group.

That said, being sensitive to free-riding may also come in a less prosocial flavour. As a personality disposition, a latent fear of being exploited can have a number of maladaptive intra- and inter-individual consequences. A specific personality trait that captures this latent fear of being exploited is called justice sensitivity from a victim’s perspective, or simply ‘victim sensitivity’ (VS; Gollwitzer et al., 2005; Schmitt et al., 2005, 2010). People high in VS (a) are particularly sensitive to others’ free-riding behaviour (e.g., Gollwitzer et al., 2009; Maltese et al., 2016) and (b) are more likely to expect other people to free-ride even when there are no strong reasons to do so (Agroskin et al., 2015; Gerlach et al., 2012; Gollwitzer et al., 2012). On the intrapersonal level, VS is associated with problem behaviour such as anxiety or substance abuse (e.g., Bilgin et al., 2022; Bondü & Inerle, 2020). On the interpersonal level, VS is associated with non-solidarity, non-cooperation, and antisocial behaviour (e.g., Bondü & Krahe, 2015; Gollwitzer et al., 2005; Gollwitzer et al., 2013).

In the immigration context, first findings support this idea as high-VS participants (compared to low-VS participants) showed more anger towards asylum-seekers in need when

there was reason to believe that the foreigners may harbour egoistic intentions (Süssenbach & Gollwitzer, 2015; Study 2). In the current research, we intend to build upon this finding in examining whether victim sensitivity is related to anti-immigration attitudes and behaviour due to a heightened fear of being exploited by immigrants.

Victim Sensitivity and the Sensitivity to Mean Intentions Model

The motivational and social-cognitive processes underlying victim sensitivity can be explained by the Sensitivity to Mean Intentions Model (SeMI Model; Gollwitzer & Rothmund, 2009; Gollwitzer, Rothmund, & Süssenbach, 2013). This model postulates that the anti-social tendencies of victim-sensitive individuals can be regarded as self-protective measures. While people who are victim-sensitive highly value trustworthiness, they tend to give more weight to untrustworthiness cues than to trustworthiness cues (Gollwitzer, Rothmund, Alt, & Jekel, 2012). Their disproportionate sensitivity to contextual cues signalling potential meanness, recklessness, and untrustworthiness feeds into a “suspicious mindset”: a social-cognitive schema consisting of (a) a strong motivation to avoid being exploited, (b) a hostile attributional bias, and (c) a tendency to rationalize, justify, and legitimize one’s own anti-social behaviour (e.g., Maltese et al., 2016).

Victim-sensitive individuals also react more strongly to potential *collective* exploitation. Past research found that individuals high in victim sensitivity (compared to people low in victim-sensitivity) reported stronger outgroup-directed anger and ingroup-directed worries (“intergroup angst”) in situations in which an out-group was framed as potentially exploitative (Süssenbach & Gollwitzer, 2015). Such sentiments also manifest in political attitudes (Traut-Mattausch, Guter, Zanna, Jonas, & Frey, 2011; Agroskin, Jonas, & Traut-Mattausch, 2015). In two national samples in the US and Germany, victim sensitivity was related to populist attitudes, the support of populist radical-right actors, and anti-immigration attitudes (Rothmund, Bromme, & Azevedo,

2020).

People high in VS were also less likely to support solidarity with countries in need of financial support during the Euro Crisis (Rothmund, Stavrova, & Schlösser, 2017). This effect was mediated by nationalistic concerns including (a) worries about the future of the nation and (b) fear of in-group exploitation. In an additional study, framing the support for debtor countries in an “exploitative frame” (compared to a “solidarity frame”) was more likely to trigger nationalistic concerns and, in turn, decrease support of solidarity for debtor countries among victim-sensitive individuals compared to less victim-sensitive people (Rothmund et al., 2017; Study 2). These findings can be interpreted as an attempt to shield one’s in-group and subsequently oneself from being exploited by out-groups.

Fear of exploitation arguably also plays a role in the current societal discourse about immigration. With the influx of immigrants into Europe between 2014 and 2015, the suspicion that the incoming population could “exploit the social security and employee benefits” grew (Trede, 2015, p. 41). The underlying suspicion that immigrants’ motives may be exploitative in nature has long followed the debates concerning immigration in Germany. German right-wing parties NPD (“National democratic Party of Germany”) and AfD (“Alternative for Germany”) nourish a public fear towards potentially exploitative motives of immigrants. For instance, during the general election campaign in 2017 one of NPD’s election slogans read, “Money for grandma, not for Sinti and Roma”, referring to the long-standing right-wing idea that cultural minorities, such as Sinti and Roma, are actually economic migrants (Bade, 2018). On the other hand, a former AfD politician stated that the German state should stop giving “cash to so-called refugees” (AfD, 2019). Right-wing political actors gained widespread support following the refugee crisis in 2015. Political scientists identify the discursive perpetuation of uncertainty and the suspicion of exploitation as important drivers of anti-social attitudes and according political

behaviour (Geiges, 2018).

With the present research, we aim to provide first empirical evidence for this conjecture. Specifically, we argue that dispositional victim sensitivity can explain people's negative stance towards immigrants and immigration based on an increased fear of being exploited. In line with the SeMI Model, victim-sensitive individuals should be more likely to report anti-immigration attitudes when cues of potential exploitation are present (and are not explicitly invalidated). As we assume that the proposed effect of victim sensitivity is mediated by a fear of exploitation and not by ideas pertaining to societal order, authoritarianism, or conservatism, we hypothesize that victim sensitivity predicts anti-immigration attitudes over and above political orientation as well as ideological variables, such as right-wing authoritarianism and social dominance orientation. In addition, we expect that victim sensitivity will predict anti-immigration attitudes over and above the three "other-oriented" justice sensitivity facets (observer-, perpetrator-, and beneficiary sensitivity). While these other-oriented justice sensitivity dimensions represent genuine moral concerns, victim sensitivity incorporates both moral concerns as well as self-protective or even egoistic motives (Gollwitzer et al., 2005; Eftedal et al. 2022). We suggest that the proposed effect will have downstream consequences on behavioural outcomes, such as anti-social behavioural tendencies against immigrants.

We test these hypotheses in three studies. We include longitudinal and cross-sectional data with varying degrees of abstraction regarding the immigration situation to ensure internal and external validity. Pre-registrations, materials, data and analyses are openly accessible (<https://osf.io/x9mp5/>).

STUDY 1

After the dissolution of the Soviet Union and the German reunification at the end of the 1980s migratory movements increased, contributing to significant socio-political changes in

Germany during the 1990s (Velling, 1996). Discussions about citizenship, asylum, and immigration law were accompanied by xenophobia and violence against immigrants (Seifert, 2012). At the time, fairness was already a pertinent theme due to unequal resource distributions in Eastern and Western Germany and this was further strengthened by residents' fear that the increasing immigrant population might exploit the German welfare system (BAMF, 2005). Therefore, the 1990s in Germany offer a particularly interesting real-world setting to test the effect of victim sensitivity on intergroup attitudes. Employing a longitudinal design with two measurement occasions, we tested our hypothesis that victim sensitivity predicts anti-immigration attitudes in a potentially exploitative setting over and above right-wing authoritarianism and other justice sensitivity facets. More specifically, we predicted a positive cross-lagged effect of victim sensitivity on anti-immigration attitudes above and beyond right-wing authoritarianism as well as observer-, perpetrator- and beneficiary sensitivity

Methods

Sample

The data we used were collected as part of a longitudinal panel survey with two measurement occasions and a two-year time interval between 1996 and 1998 on the psychological consequences of the German reunification (for other studies using the same dataset see Maes & Schmitt, 1999; Schmitt & Maes, 1998, 2002; Süßenbach & Gollwitzer, 2015). A total of 3,170 German citizens drawn by registration offices of 18 German cities and from the electronic telephone register participated in the study. They received questionnaires via mail and answered anonymously. The analyses reported here focus on a sub-sample of 1,038 participants, who reported their attitudes towards immigrants in both measurement occasions (single item)¹⁰.

¹⁰ Doing so rests on the assumption that missing data in Study 1 can be considered “completely at random” (MCAR). The plausibility of this assumption can be tested via Little’s MCAR test (Little, 1988). According to the test statistic, $\chi^2(5265) = 5171.521, p = .82$, the null hypothesis

In this sub-sample, 39.3% identified as female and 60.7% identified as male with an age range of 14 to 87 ($M = 50.15$, $SD = 15.13$).

Materials

Descriptive statistics and reliability estimates are reported in Table 1.

Justice Sensitivity. Victim, observer, and beneficiary sensitivity were measured with 10 items each (Schmitt et al., 2005). Example items are “It bothers me when others receive something that ought to be mine” for victim sensitivity; “I am upset when someone is undeservingly worse off than others” for observer sensitivity; and “I feel guilty when I receive better treatment than others” for beneficiary sensitivity. Items were rated on a 6-point response scale ranging from 0 = not at all true to 5 = absolutely true.

Right-Wing Authoritarianism. Authoritarianism was measured with 9 items. Example items are “Every group needs a strong person who makes decisions and leads” and “Governmental decisions are to be accepted, no matter if they seem reasonable to you or not”. Items were rated on a 6-point response scale ranging from 0 = strongly disagree to 5 = strongly agree.

Anti-Immigration Attitudes. Anti-immigration attitudes were measured with a single item: “Although it sounds harsh, Germany has to get rid of all the foreigners and asylum-seekers. Even if violence is needed”. Agreement with this statement was rated on a 6-point response scale ranging from 0 = strongly disagree to 5 = strongly agree.

Results and Discussion

Mean values of all variables except for anti-immigration attitudes slightly decreased over time. Effect sizes of mean changes between measurement occasions indicate that victim

(i.e., no differences between the means of different missing-value patterns) does not have to be rejected, despite the high number of variables (81) and the high sample size ($n \geq 924$), which yields a high statistical power for this test.

sensitivity remained most stable out of the justice sensitivity facets. Table 2 displays the zero-order correlations between all measured variables at both measurement occasions (T1 and T2).

To test our central hypothesis, a cross-lagged panel model was used to inspect the longitudinal causal effect structure of our measured variables (Burkholder & Harlow, 2003). More specifically, we report the results of a path analysis in which the three justice sensitivity perspectives as well as right-wing authoritarianism and anti-immigration attitudes at T1 serve as predictors for the same measures at T2 (see Figure 1). No restrictions were imposed, that is, all parameters were freely estimated. As hypothesized, the cross-lagged path from victim sensitivity at T1 on anti-immigration attitudes at T2 was positive and significant, $\beta = .09$ ($SE = .03$), $t(1038) = 3.03$, $p < .01$, above and beyond right-wing authoritarianism. No other justice sensitivity perspective at T1 predicted anti-immigration attitudes at T2. By contrast, the cross-lagged path from anti-immigration attitudes at T1 on victim sensitivity on T2 was not significant.

The present findings provide evidence for the argument that anti-immigration attitudes are at least partially predicted by a dispositional sensitivity to self-oriented injustice (i.e., victim sensitivity), above and beyond right-wing authoritarianism and the other justice sensitivity facets. In order to provide a stronger confirmation for the proposed hypotheses, including the proposition that it is particularly the fear of being exploited by immigrants that underlies the effect of victim sensitivity on anti-immigration attitudes, we conducted an experimental study, in which the “exploitative nature” of the displaced population was manipulated.

STUDY 2

In Study 2, we experimentally manipulated the fear of exploitation by providing participants with information that either (a) do not invalidate, (b) do invalidate, or (c) provide counter-arguments for the notion that immigrants may exploit the in-group (i.e., Germans). Specifically, invalidating this argument (technically speaking, “switching off” the proposed

psychological process; see Jacoby & Sassenberg, 2011; Spencer, Zanna, & Fong, 2005) should reduce the effect of victim sensitivity on anti-immigration attitudes. In the third condition (“exploitation countered”), participants were informed that immigrants often harbour prosocial rather than anti-social intentions. As victim-sensitive individuals regard cooperation as particularly desirable, yet uncertain (Gollwitzer et al., 2013), we postulate that cues alluding to prosocial intentions should reduce the effect of victim sensitivity on anti-immigration attitudes even more strongly than cues that merely invalidate the fear of exploitation. In addition, we included social dominance orientation (SDO), right-wing authoritarianism (RWA), political orientation, and the other justice sensitivity facets to test whether the hypothesized effect of victim sensitivity on anti-immigration attitudes is unique and specific.

Methods

Sample

An *a priori* power analysis was performed for sample size estimation. Based on prior research examining the interaction between victim sensitivity and the fear of exploitation (Süssenbach & Gollwitzer, 2015; Study 2), we predicted a medium effect size (Cohen's $f^2 = .06$; Cohen, 1988). Assuming an alpha of .05 and a power of .90, $N = 178$ participants are required. Our final sample includes 299 participants (see below); thus, our study is sufficiently powered to detect a practically significant effect if it exists.

Participants were invited using a university-maintained mailing list consisting of approximately 5,200 individuals who had given their consent to be invited to various survey studies. The sample is sufficiently diverse regarding demographic distributions, yet not representative for the German population. For the present study, a randomly drawn sub-sample of 1,700 individuals from this list were contacted. Participation requirements included a minimum

age of 18 years, fluency in German, and no migration background¹¹. The study was conducted in two data collection waves with an interval of two weeks to avoid methodological artefacts (i.e., carry-over effects between measures). In the first data collection wave, participants ($N = 373$) completed a questionnaire including scales measuring JS, SDO, RWA, political orientation, and contact to immigrants. Participants received an automatic e-mail invitation to take part in the second part of the survey two weeks after participation in the first part. In the second data collection wave, participants were presented with the manipulation (see below), after which they completed a questionnaire including scales measuring anti-immigration attitudes. Using a personalized code, data from both data collection waves could be matched for 299 participants (80.16%). In the final sample, 66.3% identified as female, 33.0% identified as male and 0.7% identified as diverse with an age range of 18 to 77 years ($M = 43.06$, $SD = 15.46$). Approximately one fifth (i.e., 19.4%) were currently unemployed, 65.3% were employed, 13.3% were completing a university degree, and 2% were either at school or completing a training program. In total, 51.4% had an academic degree.

Procedure

In the second data collection wave, participants took part in an online experiment. Here, respondents were asked to read an alleged screenshot of a newspaper article published by the fictional newspaper company, “Daily Compact online” (see Supplementary Online Materials, “Study 2”). In all three conditions, participants first read an introductory paragraph on the topic of immigration in Europe, which was followed by an explanation that the motives of immigrants are diverse and that some people are worried that most immigrants intend to benefit from the

¹¹ In this case, having a migration background means that the participant or at least one of the participant’s parents was born without German citizenship (Destatis, 2021). Participants with a migration background were not eligible to partake in the study because we expected biased responding as “refugees” represent an important target group in the proposed experimental design.

social welfare system in Germany without contributing to it (exploitation cues). Participants were randomly assigned to one of three versions of the article. Each version of the article differed with regard to how it continued after the exploitation cues: In the *exploitation not invalidated* condition ($n = 80$), the article continued by explaining the terms and conditions for receiving social welfare in Germany. In the *exploitation invalidated* condition ($n = 85$), the exploitation cues were followed by an explanation that worries about any exploitative motives of immigrants are unjustified as a federal report proves that the unemployment rates among immigrants are decreasing and that the state's social benefit expenditures for immigrants are likely to be re-financed. The article ended by stating that, based on projections, immigrants will not pose a burden to the German welfare state in the long run. Finally, in the *exploitation countered* condition ($n = 82$), the article mentioned that worries about any exploitative motives of immigrants are unjustified as a federal report actually proves that, due to the increasing number of employed immigrants, the German state receives more revenue due to tax and social contributions paid by immigrants than it is spending on social benefits for immigrants. The article ended by stating that, based on macro-economic statistical models, the German welfare system will ultimately profit from the influx of immigrants. After reading the article, participants' attitudes regarding immigration were assessed.

Materials

Descriptive statistics and reliability estimates are reported in Table 3.

Justice Sensitivity. The four justice sensitivity perspectives (victim, observer, beneficiary and perpetrator sensitivity; Schmitt et al., 2010)¹² were assessed using 10 items per perspective (see Study 1). Items were rated on a 6-point response scale ranging from 1 = not at all true to 6 =

¹² Schmitt et al. (2010) differentiate the "beneficiary" perspective (i.e., benefiting from injustice without being responsible for it) from the "perpetrator" perspective (i.e., benefiting from injustice that one has caused or contributed to).

absolutely true.

Right-Wing Authoritarianism. We used the 9-item KSA-3 scale by Beierlein, Asbrock, Kauff, and Schmidt (2014). Example items are “We should take strong action against misfits and slackers in society”, “People should leave important decisions in society to their leaders” and “Traditions should definitely be carried on and kept alive”. Items were rated on a 6-point response scale ranging from 1 = strongly oppose to 6 = strongly favour.

Social Dominance Orientation. We used the SDO7 scale by Ho and colleagues (2015). Example items read, “Some groups of people are simply inferior to other groups”, “Groups at the bottom should not have to stay in their place” and “Group equality should not be our primary goal”. Items were rated on a 6-point response scale ranging from 1 = strongly oppose to 6 = strongly favour.

Political Orientation. We used a single item to assess political orientation (Süssenbach & Gollwitzer, 2015). The prompt read as follows: “In politics people often talk about the ‘left’ and the ‘right’. Where would you place yourself on the following continuum?”. The item was rated on a 7-point response scale ranging from 1 = left to 7 = right.

Contact to Immigrants. We included a single item to assess participants’ contact to immigrants. The prompt “How often do you have contact to immigrants?” was followed by the answer options “never”, “rarely”, “occasionally”, “a couple times a month”, “weekly” and “daily”.

Anti-Immigration Attitudes. Based on Billiet and Meuleman’s (2012) recommendation, we assessed the following dimensions of anti-immigration attitudes: opposition against immigration into the country, perceived economic threat and perceived cultural threat. Example items are: “Borders should be closed for immigrants”, “Immigrants take jobs away from the German people” and “Cultural life in Germany is undermined by immigrants”. Items were rated

on a 6-point response scale ranging from 1 = strongly oppose to 6 = strongly favour.

Results and Discussion

Zero-order correlations between study variables in the different conditions are reported in Tables 4-6. A manipulation check revealed that while individuals in the *exploitation not invalidated* condition expect motives of immigrants to be more exploitative ($M = 3.01$, $SD = 1.87$) than people in the *exploitation invalidated* condition ($M = 2.45$, $SD = 1.52$), $t(163) = 2.13$, $p = .03$, $d = .33$, this mean difference was neither found between the *exploitation not invalidated* and the *exploitation countered* conditions ($M = 2.94$, $SD = 2.07$), $t(160) = 0.24$, $p = .81$, $d = .04$, nor between the *exploitation invalidated* and the *exploitation countered* condition, $t(165) = -1.75$, $p = .08$, $d = .27$. This means that our manipulation was only partly successful: while exploitation expectations were only slightly reduced in the *exploitation invalidated* condition, we did not achieve this in the *exploitation countered* condition. We will come back to this in the Discussion.

To test our predictions that the effect of victim sensitivity on anti-immigration attitudes is significantly reduced when the assumed mediator is “switched off”, that is, when a fear of being (collectively) exploited is explicitly invalidated and that the effect is even more reduced when the fear is countered with cues of cooperation, hierarchical regression analyses were conducted (Table 7). All measured variables except for political orientation were standardized. Control variables, including demographics, right-wing authoritarianism, social dominance orientation, and political orientation were entered in Step 1. The justice sensitivity perspectives and two contrast variables representing hypothesized differences between experimental conditions (Contrast 1: *exploitation not invalidated* = -2, *exploitation invalidated* = 1, *exploitation countered* = 1; Contrast 2: *exploitation not invalidated* = 0, *exploitation invalidated* -1, *exploitation countered* = 1) were added in Step 2. The interaction terms (victim sensitivity \times Contrast 1, victim sensitivity \times Contrast 2) were included in Step 3. As expected, we found a significant

unconditional effect of victim sensitivity on anti-immigration attitudes, $\beta = .16$ ($SE = .05$), $t(297) = 2.94$, $p = .04$. Neither Contrast 1, $\beta = .02$ ($SE = .07$), $t(297) = .33$, $p = .74$, nor Contrast 2, $\beta = .06$ ($SE = .06$), $t(297) = 1.34$, $p = .18$, had a significant unconditional effect on anti-immigration attitudes.

Contrary to our predictions, the interaction terms were not significant according to conventional levels (p 's = .52 and .60). However, looking at the simple effects of victim sensitivity on anti-immigration attitudes in each condition, separately, we found that victim sensitivity significantly predicted anti-immigration attitudes in the *exploitation not invalidated* condition, $\beta = .23$ ($SE = 0.11$), $t(77) = 2.05$, $p = .04$, $R^2 = .05$. We found this effect even after controlling for the other justice sensitivity perspectives and ideological variables, including right-wing authoritarianism, social dominance orientation, and political orientation, $\beta = .23$ ($SE = 0.10$), $t(77) = 2.40$, $p = .02$, $R^2 = .05$. Importantly, the effect of victim sensitivity on anti-immigration attitudes was no longer significant in the *exploitation invalidated* condition, $\beta = .11$ ($SE = 0.12$), $t(82) = 1.02$, $p = .31$, $R^2 = .01$, and the *exploitation countered* condition, $\beta = .11$ ($SE = 0.07$), $t(79) = .96$, $p = .34$, $R^2 = .01$.

A closer look at the anti-immigration dimensions showed that while VS was positively related to economic threat, $\beta = .20$ ($SE = 0.06$), $t(245) = 3.17$, $p < .01$, $R^2 = .04$, VS was neither related to cultural threat, $\beta = .10$ ($SE = 0.06$), $t(245) = 1.53$, $p = .13$, $R^2 = .01$, nor to general opposition to immigration, $\beta = .12$ ($SE = 0.06$), $t(245) = 1.82$, $p = .07$, $R^2 = .01$. In addition, we found an indirect effect of VS on opposition to immigration via economic threat (95% CI: .01, .12) but not via cultural threat (95% CI: -.04, .03) (see Figure 2). Based on this, we tested the interaction terms from our first analysis with economic threat as our new dependent variable. Again, while we did not find any significant interaction terms (p 's = .96 and .76), we found that victim sensitivity significantly predicted economic threat in the *exploitation not invalidated*

conditions, $\beta = .23$ ($SE = 0.11$), $t(77) = 2.03$, $p = .04$, $R^2 = .05$, but neither in the *exploitation invalidated* condition, $\beta = .19$ ($SE = 0.13$), $t(82) = 1.72$, $p = .09$, $R^2 = .04$, nor in the *exploitation countered* condition, $\beta = .19$ ($SE = 0.10$), $t(79) = 1.76$, $p = .08$, $R^2 = .04$.

Several conclusions can be drawn from this study. The simple effects of victim sensitivity on opposition to immigration and economic threat in the different conditions as well as the indirect effect of VS on opposition to immigration via economic threat are in line with our theorizing that it is specifically the fear of (economic) exploitation that drives the effect of victim sensitivity on anti-immigration attitudes. However, our attempt to provide robust evidence for this effect by negating the assumed mediator was unsuccessful. Our first post-hoc explanation is that participants – especially those high in victim sensitivity – did not really believe what they read in the (fake) articles and became suspicious about the intentions and credibility of the article’s source. This alternative explanation was tested in a follow-up study. No evidence could be found to support this claim (Table 8; for a full report of this study, see SOM “Study 2.1”). Our second explanation follows from the idea that negating the assumed mechanism (i.e., fear of exploitation) might necessitate making the evidence invalidating the fear of exploitation more explicit, tangible, and self-relevant. Victim-sensitive individuals tend to expect negative personal outcomes in uncertain situations, both in interpersonal situations, such as social dilemmas (e.g., Fetchenhauer & Huang, 2004) as well as in situations of collective change, such as political reforms (e.g., Traut-Mattausch et al., 2011). In Study 2, we attempted to invalidate (and counter) the fear of being (personally) exploited by providing evidence for *collective* benefits due to immigration (i.e., increase in federal tax revenue) and projections (i.e., immigrants will not pose a burden to the German welfare state in the long run). However, the evidence provided does not refute any possibility of negative consequences for the individual him- or herself. Finally, participants’ prior beliefs could have affected their reported attitudes. Specifically, research

shows that prior political stances are related to continued or even strengthened beliefs in retracted or refuted information (Ecker & Ang, 2018; Ma, Dixon, & Hmielowski, 2019).

Study 3 was designed to address the two latter limitations. In addition, we intend to target the psychological mechanism more precisely. As argued in our theoretical introduction, we assume that high-VS individuals are particularly sensitive to other peoples' (here: immigrants') egoism and malevolence, and not to being disadvantaged due to others' lack of knowledge, competence, or inability. In Study 3, we therefore differentiated between attributing "exploitation" to either malevolence or inability.

STUDY 3

Study 3 was conducted to (a) test the causal effect of victim sensitivity on anti-immigration attitudes more rigidly, (b) scrutinize the assumed mediator of the proposed effect, namely, a heightened fear of (personal) exploitation, and (c) investigate downstream consequences on observable behaviour towards immigrants in a more strongly controlled lab setting. Specifically, we employed a computerized economic game, which captured the fundamental structural properties of the immigration situation. A central advantage of using an economic game with real resources (rather than a vignette or "fake article" design as in Study 2) was that we could create a more immersive situation, in which possible exploitation as well as the invalidation and countering of exploitation was experienced in a more direct, tangible, and self-relevant manner. In addition, the abstraction of the immigration situation allowed us to control for prior (political) beliefs. Data were collected according to the guidelines of the British Journal of Psychology, the German Psychological Society¹³, as well as other applicable rules and regulations (e.g., GDPR). The approved Stage 1 protocol can be found here: <https://osf.io/je3bp>.

¹³ <https://www.dgps.de/die-dgps/aufgaben-und-ziele/berufsethische-richtlinien/> (in German only)

Method

Sample

Based on an *a priori* power analysis using G*Power (Faul, Erdfelder, Lang, & Buchner, 2007), we determined a necessary sample size of $N = 175$. This estimation was based on the smallest effect size observed for the interaction between victim sensitivity and fear of exploitation (Cohen's $f^2 = .06$; Süßenbach & Gollwitzer, 2015, Study 2) and assuming a power of 90% and a significance level of 5% (two-tailed). To account for dropouts or invalid cases, we increased the sample size to $N = 195$. Participation requirements included a minimum age of 18 years as well as fluency in German. Data collection was stopped when the required sample size was obtained. Cases were defined as invalid if participants reported being suspicious about (a) the existence of their fellow players, (b) the information they received during the experiment, and (c) their monetary compensation during the funnelled debriefing (see below). We excluded 16 participants based on these criteria. Our final sample includes 178 participants (64.6% female, 32.6% male, 2.8% diverse) with an age range of 18 to 65 years ($M = 24.70$, $SD = 7.34$). The majority of participants were students (87.1%) and 11.3% were employed.

Experimental Paradigm

In this study, we used an adapted version of the “Refugee Game” developed by Böhm, Theelen, Rusch, and van Lange (2018). This computerized economic game allowed us to examine whether participants’ immediate experience that a potentially exploitative out-group (i.e., immigrants) either does not exploit (i.e., invalidation of exploitation) or even benefits (i.e., countering exploitation) the in-group would diminish the effect of victim sensitivity on anti-immigration attitudes (and behaviour).

The study consisted of five parts (for an overview of the computerized experiment, see Supplementary Online Material, “Study 3”). In Part 1, participants completed a questionnaire

capturing demographic information, the Justice Sensitivity scales, and control variables (see Materials below for details). In Part 2, participants completed an alleged “cognitive test” (for more information on this test, see SOM, “Study 3”). According to their individual results, they were allocated into two groups: “Group 1” (allegedly consisting of 20 individuals) and “Group 2” (allegedly consisting of 10 individuals). Importantly, the results participants received were arbitrary and, in reality, all participants were assigned to “Group 1”. However, it is important that participants believed that their group (“Group 1”) was (a) larger than and (b) distinct from Group 2 with regard to a criterion that is *theoretically* (yet not necessarily empirically) unrelated to group performance. With this design, we intended to mirror the relationship between a “host community” and “immigrants” (cf., Mahfud, Badea, Verkuyten, & Reynolds, 2018).

In Part 3, participants were introduced to a “slider task”, which mirrored the effort people need to invest to earn money (i.e., they do a job to make a living; for more information, see Böhm et al., 2018). Participants were informed that they would be playing several rounds of this task. In each round, players had 70 seconds to position 48 sliders to their mid-point. For every correctly positioned slider, players received 5 points. Thus, participants could receive a maximum of 240 points per round. The points were then converted to real money. Participants’ salary was subject to an income tax of 40%. After each round of the game, players received their salary as well as an equal share of the total tax collected from all players in the group. Thus, participants’ earnings also depended on the other players’ performance. At the end of each round, participants were presented with a game overview, including (a) a game summary showing the participant’s performance, (b) an overview of their salary and the contribution to a tax account, (c) the participant’s fellow group members’ mean earnings and mean contributions to the tax account and (d) the participant’s final income. Participants were informed that the two groups would play the same game, but independently and on different “platforms”. Before the start of the first round,

participants completed a practice round.

In Part 4, participants played the first round of the “slider task.” The game summary after the first round showed that the players’ individual performance was close to the mean performance in Group 1. After the game summary was shown, players received two messages. In the first message, they were informed that, due to “complications” in Group 2, some players in this group had requested to join Group 1. Participants were shown the mean performance of players in Group 2, which was 50% lower than the mean performance of Group 1. Participants were informed that players in Group 2 were also shown the performance overview of Group 1. Importantly, it remained open whether Group-2 players intended to join Group 1 strategically because they were unwilling to perform better (i.e., laziness or lack of engagement) or whether the worse performance in Group 2 was due to capability issues (i.e., individual inability or external factors).

In the second message, participants were informed that each player in Group 1 (henceforth called “citizens”) would be asked to report their attitudes towards Group-2 players (henceforth called “immigrants”) and to submit an answer to the question whether they think that the performance of the immigrants could be attributed to unwillingness or to inability. In addition, citizens were asked to submit a decision as to how many immigrants they think should be allowed to join Group 1 in the next round (prosocial behaviour at time-1: the higher the number, the more immigrants are allowed to join; see below). Citizens were told that the final number of immigrants being allowed to join the citizens would be determined by randomly choosing one citizen’s decision. Before the next round, citizens were informed that four immigrants would be joining their group in the next round.

Next, participants played the second round of the slider task. Here, the experimental manipulation was introduced: After the game, players were randomly shown one of three variants

of the game summary. In the *exploitation not invalidated* condition, the game overview showed that their group's mean performance had dropped by 50% compared to Round 1. In the *exploitation invalidated* condition, the game overview showed that their group's mean performance had not changed between Rounds 1 and 2. In the *exploitation countered* condition, the game overview showed that their group's mean performance had improved by 50% compared to Round 1. Thereafter, participants were asked whether the average contribution to the tax account in Round 2 was lower, the same, or higher compared to Round 1 (i.e., manipulation check). Next, participants again reported their attitudes towards the immigrants and their evaluation of the immigrants' intentions to join Group 1. Then, participants were informed that they could decide how many immigrants should be allowed to join their group for the next and final round (prosocial behaviour at time-2).

In Part 5, participants were paid the amount they had earned in both rounds of the game. Specifically, participants received a funnelled debriefing in order to assess the extent to which they were suspicious about (a) the aims of this study, (b) the existence of their fellow players, and (c) the manipulation regarding average group performance in Round 2. The average completion time was 23.8 minutes.

Materials

Descriptive statistics and reliability estimates are reported in Table 9.

Control Variables. To measure Justice Sensitivity as well as the control variables Social Dominance Orientation, Right-Wing Authoritarianism, and political orientation, the same measures as in Study 2 were used.

Experimental Conditions. Mirroring the experimental conditions in Study 2, but adapted to the present context, we implemented three experimental conditions (see SOM, "Study 3"). After Round 1, participants were informed that their group's performance had either dropped due

to the influx of immigrants (*exploitation not invalidated*), remained constant (*exploitation invalidated*), or improved (*exploitation countered*).

Perceived Exploitation. After Round 1 and Round 2, participants were asked the following question: “What do you think: Why do the players in Group 2 want to leave their group and join your group (Group 1) instead? Is it because the Group-2-players want to benefit from the better performance in Group 1 without having to contribute much themselves (we abbreviate this here to "WANT"), or is it because the Group-2-players are reaching their performance limits in their own group and hope to be able to perform better in Group 1 (we abbreviate this here to "CAN")? Please indicate on the following answer scale whether you attribute the desire for a group change among Group-2-players more to WANT (left side) or more to CAN (right side).

Anti-Immigration Attitudes. Mirroring the scale used in Study 2, which captures anti-immigration dimensions proposed by Billiet and Meuleman (2012), we assessed opposition against new “immigration” as well as perceived economic and cultural threat. Example items are: “I think the maximum of Group 2-players allowed to play in Group 1 should be lower than 10”, “Group 2-players will have a negative effect on our group’s performance,” and “I think Group 2-players will have a bad influence on our group”. Items will be rated on a 6-point response scale ranging from 1 = strongly disagree to 6 = strongly agree.

Prosocial Behaviour towards Immigrants. Participants in Group 1 were asked to indicate how many players of Group 2 should be allowed to join their group in the next round. Participants were informed that at least one member of Group 2 *would have to* be allowed to join Group 1. Citizens were further informed that they would be asked to indicate their decision several times and that the pool of immigrants would always remain the same (i.e., 10); thus, this measure could always range between 1 (i.e., the minimal number of immigrants) to 10 (the maximum). Participants were led to believe that the final decision about the number of

immigrants to be included in Group 1 would be determined by randomly choosing one decision made by a member of Group 1. However, unbeknownst to participants, the number was always fixed to 4.

Hypotheses and Analysis Plan

We tested the following conceptual hypotheses:

Hypothesis 1: Victim sensitivity positively predicts perceived exploitation as well as anti-immigration attitudes and negatively predicts prosocial behaviour towards immigrants when cues of (personal) exploitation are present (and not invalidated or countered).

Hypothesis 2: This effect exists even after controlling for Social Dominance Orientation, Right-Wing Authoritarianism, political orientation, demographics (age, gender), and other JS facets.

Hypothesis 3: The effect of victim sensitivity on perceived exploitation, anti-immigration attitudes, and prosocial behaviour towards immigrants is reduced when the assumed mediator is “switched off,” that is, when a fear of being (personally) exploited is explicitly invalidated or countered.

Hypothesis 4: The effect of victim sensitivity on perceived exploitation, anti-immigration attitudes, and prosocial behaviour towards immigrants is reduced when a fear of being (personally) exploited is countered with cues suggesting cooperative motives of the immigrant population compared to merely invalidated.

Dependent variables were the intra-individual differences in (a) perceived exploitation, (b) anti-immigration attitudes, and (c) prosocial behaviour towards immigrants between Rounds 1 and 2 (time-2 minus time-1, such that positive values represent an increase in perceived exploitation, anti-immigration attitudes, and prosocial behaviour, respectively). We used multiple regression models to test our hypotheses, one for each difference variable. The central predictors

in all of these models were Victim Sensitivity VS (standardized), two dummy variables (into which the three experimental conditions are coded), $VS \times \text{Dummy 1}$, and $VS \times \text{Dummy 2}$. The model testing Hypothesis 2 also included the eight covariates listed above.

This resulted in the following empirical hypotheses:

Hypothesis 1: In this model, dummy variables were coded such that the condition in which a fear of exploitation was neither invalidated nor countered represented the baseline (Dummy 1: 0 = *exploitation not invalidated*; 1 = *exploitation invalidated*; Dummy 2: 0 = *exploitation not invalidated*; 1 = *exploitation countered*). In the three regression models (one for each DV) we included the five predictors listed above. We expected a negative effect of VS on prosocial behaviour towards immigrants (more specifically, on the intra-individual difference in positive behaviour between Rounds 1 and 2) and a positive effect of VS on perceived exploitation and anti-immigration attitudes (more specifically, on the intra-individual difference in perceived exploitation and anti-immigration attitudes between Rounds 1 and 2). Due to our coding, the effect of VS in this model represents a conditional effect in the control condition (i.e., *exploitation not invalidated*).

Hypothesis 2: In the same regression models (one for each DV) including the five predictors plus the covariates, we expected to find the assumed effects of VS even after controlling for Social Dominance Orientation, Right-Wing Authoritarianism, political orientation, demographics (age, gender), and the other JS facets. The coding scheme was the same as in the model described before (see Hypothesis 1).

Hypothesis 3: In this model, contrast variables were Helmert-coded as in the previous studies, with Contrast 1 representing the difference between the control condition and the other two conditions (Contrast 1: -2 = *exploitation not invalidated*; 1 = *exploitation invalidated*; 1 = *exploitation countered*), and Contrast 2 representing the difference between the *exploitation*

invalidated and the *exploitation countered* conditions (Contrast 2: 0 = *exploitation not invalidated*; -1 = *exploitation invalidated*; 1 = *exploitation countered*). In the three regression models (one for each DV) we included the five predictors listed above. We expected a positive effect of VS \times Contrast 1 on prosocial behaviour towards immigrants (more specifically, on the intra-individual difference in positive behaviour between Rounds 1 and 2) and a negative effect of VS \times Contrast 1 on perceived exploitation and anti-immigration attitudes (more specifically, on the intra-individual difference in perceived exploitation and anti-immigration attitudes between Rounds 1 and 2).

Hypothesis 4: In the same models described in Hypothesis 3, we additionally expected a positive effect of VS \times Contrast 2 on prosocial behaviour towards immigrants (more specifically, on the intra-individual difference in positive behaviour between Rounds 1 and 2) and a negative effect of VS \times Contrast 2 on perceived exploitation and anti-immigration attitudes (more specifically, on the intra-individual difference in perceived exploitation and anti-immigration attitudes between Rounds 1 and 2).

All effects were tested on a significance level of 5% (two-tailed).

Results and Discussion

A manipulation check showed the following results: In the *exploitation not invalidated* condition (group performance was worse with immigrants), 63.3% reported that the performance was worse, 25% reported that the performance did not change, and 7% reported that the performance improved. In the *exploitation invalidated* condition (group performance remained the same with immigrants), 24.6% reported that the performance was worse, 36.1% reported that the performance did not change, and 39.3% reported that the performance improved. Lastly, in the *exploitation countered* condition (group performance improved with immigrants), 8.8% reported that the performance was worse, 10.5% reported that the performance did not change

and 80.7% reported that the performance improved. Thus, the manipulation was partly successful. Zero-order correlations between study variables in the overall sample and separated by experimental conditions are reported in Tables 10-13.

Confirmatory Analyses

Hypothesis 1: Contrary to our expectations, the effect of victim sensitivity on an increase in prosocial behaviour was positive rather than negative, $\beta = .32$ ($SE = 0.14$), $t(174) = 2.34$, $p = .02$, $R^2 = .12$, and the effect on an increase in anti-immigration attitudes was negative rather than positive, $\beta = -.23$ ($SE = 0.08$), $t(174) = -2.70$, $p = .01$, $R^2 = .16$. In other words, in the control condition *exploitation not invalidated*, victim sensitivity predicted higher scores in prosocial behaviour at T2 compared to T1 and lower scores on anti-immigration attitudes at T2 compared to T1. There was no significant relationship between victim sensitivity and the intra-individual difference in perceived exploitation, $\beta = -.18$ ($SE = 0.10$), $t(174) = -1.78$, $p = .08$, $R^2 = .05$.

Ceiling and floor effects on the dependent variables can explain these effects. We examine this in exploratory analyses.

Hypothesis 2: When controlling for political orientation, Social Dominance Orientation, Right-Wing Authoritarianism, demographics (age, gender) and the other JS facets, the effect of victim sensitivity on an increase in prosocial behaviour, $\beta = .36$ ($SE = 0.15$), $t(166) = 2.45$, $p = .02$, $R^2 = .12$, on an increase in anti-immigration attitudes, $\beta = -.24$ ($SE = 0.09$), $t(166) = -2.66$, $p = .01$, $R^2 = .13$ and on an increase in perceived exploitation, $\beta = -.20$ ($SE = 0.11$), $t(166) = -1.81$, $p = .07$, $R^2 = .04$ remained unchanged.

Hypotheses 3 and 4: Table 14 shows an overview of the hierarchical regressions on the outcome variables. Contrary to our predictions, the focal interaction terms were not significant according to conventional levels. Therefore, the results did not support Hypotheses 3 and 4.

Exploratory Analyses

Post-hoc analyses revealed ceiling and floor effects on prosocial behaviour at T1 and anti-immigration attitudes at T1, respectively. A relatively large number of participants (i.e., 35.4%) chose to allow the maximum number of “immigrants” (10) to join their group at T1 ($M = 6.46$, $SD = 3.02$). Among participants who scored low on victim sensitivity (1 SD below the sample mean), this ceiling effect was even more pronounced with 57.7% allowing the maximum number of “immigrants” to join their group at T1 ($M = 7.69$, $SD = 2.94$). Additionally, in this sub-sample, a floor effect was found on the variable anti-immigration attitudes ($M = 2.22$, $SD = 0.87$). Ceiling and floor effects allow less room for intra-individual variability, thereby decreasing the explanatory value of difference variables (cf. Allaire & Marsiske, 2005). Therefore, we re-did analyses using only T2 measures as dependent variables (post-manipulation).

As expected, victim sensitivity negatively predicted prosocial behaviour at T2, $\beta = -.51$ ($SE = .24$), $t(174) = -2.13$, $p = .04$, $R^2 = .05$, and positively predicted anti-immigration attitudes at T2, $\beta = .33$ ($SE = .09$), $t(174) = 3.48$, $p < .01$, $R^2 = .12$. In other words, in the *exploitation not invalidated* condition, VS had the expected effects on both prosocial behaviour and on anti-immigration attitudes. These effects persisted when controlling for Social Dominance Orientation, Right-Wing Authoritarianism, political orientation, demographics (age, gender), and the other JS facets (see Table 15). Victim sensitivity did not predict perceived exploitation at T2, $\beta = -.03$ ($SE = .14$), $t(174) = -.22$, $p = .82$, $R^2 = .03$. We assume that this effect is spurious because several participants reported that they had difficulty understanding the item. Further studies should examine the perceived “malicious intention” among VS-high participants using a simpler measurement.

To test whether the effects of victim sensitivity on prosocial behaviour and anti-immigration attitudes was diminished when invalidating or countering the fear of exploitation

(Hypotheses 3 and 4), we conducted hierarchical regressions on all three dependent variables at T2, including the contrasts specified above (Table 16). The interaction terms were not significant according to conventional levels. To probe these results, we conducted simple slope analyses. While victim sensitivity was negatively related to prosocial behaviour at T2, ($\beta = -.51, p = .04$) and positively related to anti-immigration attitudes at T2 ($\beta = .33, p < .01$) in the *exploitation not invalidated* condition, the effects of victim sensitivity on prosocial behaviour ($\beta = -.16, p = .34$; $\beta = -.29, p = .11$) and anti-immigration attitudes ($\beta = .30, p = .06$; $\beta = .18, p = .34$) disappeared in the *exploitation invalidated* and *exploitation countered* conditions. Based on the results of the manipulation check we repeated all confirmatory and exploratory analyses with a new dataset, in which we only included participants who answered the manipulation check correctly. The results did not differ.

The results corroborate and extend the findings from Studies 1 and 2 showing that victim sensitivity is related to anti-social attitudes and behaviour towards immigrants when exploitation is possible. Similar to Study 2, we did find evidence that individuals who score high on victim sensitivity show anti-social tendencies towards immigrants (at least at Time-2) when cues of exploitation were present. We did not, however, find the predicted decrease in prosocial behaviour as well as the predicted increase in anti-immigration attitudes between Time-1 and Time-2, and we believe that this is due to a ceiling effect.

More importantly, however, we did not find evidence for the notion that countering or invalidating a fear of being exploited can reduce the effect of victim sensitivity on prosocial behaviour and on anti-immigration attitudes. In other words, direct, tangible, and self-relevant evidence suggesting that the influx of immigrants would not lead to a loss of personal resources did not make victim-sensitive individuals less sceptical about immigration.

General Discussion

Individual differences in justice perceptions influence how people think and behave in interpersonal and intergroup contexts (Baumert, Adra, & Li, 2022; Gerlach et al., 2012). Thus, it is understandable that a growing research field has examined whether and how justice sensitivity can explain political attitudes and behaviours (e.g. Agroskin et al., 2015; Nicolai, Franikowski, & Stoll-Kleemann, 2022; Rothmund et al., 2017). In the case of immigration, first findings showed that a dispositional sensitivity to being the victim of injustice (i.e., victim sensitivity) was related to anger and negative attitudes towards immigrants (Rothmund et al., 2020; Süssenbach & Gollwitzer, 2015). With the current set of studies, we build upon these findings by investigating the causality of this relationship (Study 1), the motivational and social-cognitive processes underlying the effect (Studies 2 and 3), and downstream consequences on observable behaviour (Study 3). Together, the current findings shed light on the robustness of the investigated effect and provide new theoretical and practical insights.

Across all studies, we found that victim sensitivity predicted anti-immigration attitudes over and above ideological, political, and demographic variables. Our research is the first to show that this effect is generalizable to different historical, social, and experimental contexts. Victim sensitivity was related to negative attitudes towards immigrants and immigration in the context of post-reunification Germany in the 1990s, the European refugee crisis in 2015 and 2016, as well as in an artificial laboratory setting, in which we modelled the structural properties of immigration. In our third and final study, we showed that the effect of victim sensitivity on anti-immigration attitudes translates into anti-social behaviour towards immigrants. These findings suggest that peoples' perceptions and treatments of immigrants are not only related to specific ideas about deservingness or resource distributions (e.g., Jetten, Mols, & Postmes, 2015; Reeskens & van der Meer, 2019), but also to stable individual differences in how people perceive

(potential) injustice.

Based on assumptions regarding the psychological processes underlying victim sensitivity (Gollwitzer & Rothmund, 2009; Gollwitzer et al., 2013), we hypothesized that a heightened fear of exploitation can explain the negative perceptions and behaviours towards immigrants. Indeed, Study 2 showed that victim-sensitive individuals were more inclined to believe that immigrants' main reason to apply for asylum in Germany is to profit from the social welfare system. In addition, the effect of victim sensitivity on anti-immigration attitudes was mediated by economic, but not by cultural threat. Both studies showed that the effect of victim sensitivity on anti-immigration attitudes and behaviour appears in situations, in which exploitation cues are present and are not invalidated. These results support earlier findings suggesting that victim-sensitive individuals show anti-social tendencies towards out-groups when the out-group is "framed" in an exploitative manner (e.g., Rothmund et al., 2017; Süssenbach & Gollwitzer, 2015).

In two conservative tests, we attempted to scrutinize this mechanism by testing whether "switching off" the proposed psychological process would diminish (or even kill) the effect of victim sensitivity on anti-immigration attitudes (cf., Jacoby & Sassenberg, 2011; Spencer, Zanna, & Fong, 2005). Yet, it did not. This might have methodological as well as theoretical reasons. Methodologically, the manipulations might not have been effective in attenuating the psychological process. In Study 2, we attempted to invalidate and counter the fear of exploitation by using real evidence taken from a federal report suggesting that immigration will (a) not have negative or (b) even have positive effects on German society in the long-run. This information might not have been explicit, tangible, and self-relevant enough to invalidate the fear of exploitation. In this respect, a challenge might have been that especially victim-sensitive individuals expect negative *personal* outcomes in situations of collective change (e.g., Traut-Mattusch et al., 2011). In Study 3, we therefore chose to move to a laboratory setting, in which

we attempted to negate the fear of exploitation by letting a representative sample of the out-group play one round with the participants' in-group. However, based on the social dilemma literature, a one-shot game might not be enough to motivate cooperation in a public goods scenario as cooperative norms emerge dynamically over time and in an interplay of static factors, such as shared social identity and pre-existing norms (e.g., Titlestad, Snijders, Durrheim, Quayle, & Postmes, 2019).

From a theoretical perspective, the failure to find experimental evidence for the notion that it is a fear of exploitation that drives the effect of victim sensitivity on anti-immigration attitudes challenges assumptions of the Sensitivity to Mean Intentions Model (SeMI; Gollwitzer & Rothmund, 2009). Yet, our results are also theoretically informative and may be taken as a starting point to qualify and extend the SeMI model's predictions. Our attempt to negate the fear of exploitation might have failed because victim-sensitive individuals are generally more sensitive to untrustworthiness than to trustworthiness cues (Gollwitzer et al., 2012). Our finding that the difference between victim-sensitive and victim-*insensitive* individuals with regard to anti-immigration attitudes and behaviours was apparent in the exploitation conditions but not in the exploitation invalidated and countered conditions supports the so-called "asymmetry hypothesis". Victim-sensitive individuals did attend to the "trustworthiness cues" in both studies, but this did not lead to a reduction in anti-social attitudes and behaviour supporting the conjecture that victim-sensitive people simply weigh untrustworthiness cues more strongly when they evaluate others and make decisions in social interactions ("integrational asymmetry"; Gollwitzer et al., 2013). Further, according to the "defection hypothesis", victim-sensitive individuals tend to behave uncooperatively in social dilemmas if there is any reason to believe that others freeride (Gollwitzer et al., 2009). Thus, even in Study 3, victim-sensitive individuals might have suspected that the "cooperative sample" of four immigrants might not have been representative of

the total immigrant pool.

On the other hand, the current findings could also suggest that the anti-social tendency of victim-sensitive individuals towards immigrants might not only hinge on attributing hostile intentions. Another explanation could be that victim sensitivity enhances an inter-group bias (Tajfel, 1970). Victim-sensitive individuals share a particularly strong need to trust (Gollwitzer & Rothmund, 2009), which can also be achieved by strengthening ties within one's ingroup (Hogg, 2007). Thus, the negative relation between VS and anti-immigration attitudes could also represent a form of generalized out-group derogation for the sake of increasing in-group cohesiveness (Meeus, Duriez, Vanbeselaere, & Boen, 2015). Recent theorizing supports this, arguing that group-identification might drive anti-social inter-group behaviour among victim-sensitive individuals (Baumert et al., 2022).

More conclusive evidence is needed to understand whether the anti-social tendencies of victim-sensitive individuals towards immigrants are mainly based on the attribution of hostile intentions (Gollwitzer et al., 2013), on group-identification processes (Baumert et al., 2022), or on a combination of both. Based on the present results, future research could examine whether the effects of victim sensitivity on anti-immigration attitudes and behaviour can be diminished (or even reversed) when the risk of exploitation is completely negated and whether a common group identity could mitigate the fear of exploitation in socially uncertain situations. Finally, studies could look at other "buffers" (Gollwitzer et al., 2013) which might alleviate anti-social tendencies among victim-sensitive individuals. For instance, intervention-focused research could investigate whether descriptive norms signalling cooperative intentions of in-group members towards out-group members could reduce anti-immigration attitudes and behaviour among victim-sensitive individuals.

Conclusion

Globalization, climate change, conflicts. There are enough reasons to identify immigration as one of the biggest challenges of the present and the future. Host nations around the world need to find constructive ways to integrate immigrants from various countries, with different backgrounds, cultures and religions. In order to achieve a successful integration of immigrants, we need to understand the multidimensional antecedents of peoples' attitudes and behaviour towards immigrants and immigration. While psychological research on anti-immigration sentiments and behaviours has mainly focused on ideology, prejudice, and economic factors, the present findings show that we need to consider stable individual differences in peoples' sensitivity to injustice when examining people's attitudes and behaviour towards immigrants.

References

- AfD. (2019). *Andreas Kalbitz: Mehr Taschengeld für Asylbewerber auszuschütten, ist der falsche Weg!* Alternative für Deutschland. <https://afdkompakt.de/2019/03/11/mehr-taschengeld-fuer-asylbewerber-auszuschuetten-ist-der-falsche-weg/>
- Agroskin, D., Jonas, E., & Traut-Mattausch, E. (2015). When suspicious minds go political: Distrusting and justifying the system at the same time. *Political Psychology*, 36(6), 613–629. <https://doi.org/10.1111/pops.12185>
- Allaire, J. C., & Marsiske, M. (2005). Intraindividual Variability May Not Always Indicate Vulnerability in Elders' Cognitive Performance. *Psychology and aging*, 20(3), 390–401. <https://doi.org/10.1037/0882-7974.20.3.390>
- Bade, K. J. (2018). Migration in der europäischen Geschichte seit dem späten Mittelalter [2002]. *Historical Social Research / Historische Sozialforschung. Supplement*, 30, 227–234.
- BAMF. (2005). *The Impact of Immigration on Germany's Society*. BAMF - Bundesamt Für Migration Und Flüchtlinge. Retrieved from <https://www.BAMF.de/SharedDocs/Anlagen/EN/Forschung/Forschungsberichte/fb01-einfluss-zuwanderung.html;jsessionid=A2FF418529E4F9923FBF92F535D4107C.intranet661?nn=456500>
- Baumert, A., Adra, A., & Li, M. (2022). Justice Sensitivity in Intergroup Contexts: A Theoretical Framework. *Social Justice Research*, 35(1), 7–32. <https://doi.org/10.1007/s11211-021-00378-9>
- Beierlein, C., Asbrock, F., Kauff, M., & Schmidt, P. (2014). *Die Kurzsкала Autoritarismus (KSA-3): Ein ökonomisches Messinstrument zur Erfassung dreier Subdimensionen autoritärer Einstellungen* (Bd. 2014/35). GESIS - Leibniz-Institut für Sozialwissenschaften.

- Bilgin, A., Bondü, R., & Elsner, B. (2022). Longitudinal associations between justice sensitivity, nonsuicidal self-injury, substance use, and victimization by peers. *Development and Psychopathology*, *34*(4), 1560–1572. <https://doi.org/10.1017/S0954579421000250>
- Billiet, J., & De Witte, H. (2008). Everyday racism as predictor of political racism in Flemish Belgium. *Journal of Social Issues*, *64*(2), 253–267. <https://doi.org/10.1111/j.1540-4560.2008.00560.x>
- Billiet, J., & Meuleman, B. (2012). Measuring attitudes toward immigration in Europe: The cross-cultural validity of the ESS immigration scales. *ASK. Research & Methods*, *21*, 5–29.
- Böhm, R., Theelen, M. M. P., Rusch, H., & Van Lange, P. A. M. (2018). Costs, needs, and integration efforts shape helping behaviour toward refugees. *PNAS Proceedings of the National Academy of Sciences of the United States of America*, *115*(28), 7284–7289. <https://doi.org/10.1073/pnas.1805601115>
- Bondü, R., & Inerle, S. (2020). Afraid of injustice? Justice sensitivity is linked to general anxiety and social phobia symptoms. *Journal of Affective Disorders*, *272*, 198–206. <https://doi.org/10.1016/j.jad.2020.03.167>
- Bondü, R., & Richter, P. (2016). Linking forms and functions of aggression in adults to justice and rejection sensitivity. *Psychology of Violence*, *6*, 292–302. <https://doi.org/10.1037/a0039200>
- Burkholder, G., & Harlow, L. (2003). An illustration of a longitudinal cross-lagged design for larger structural equation models. *Structural Equation Modeling*, *10*, 465–486. https://doi.org/10.1207/S15328007SEM1003_8

- Canetti, D., Snider, K. L. G., Pedersen, A., & Hall, B. J. (2016). Threatened or threatening? How ideology shapes asylum seekers' immigration policy attitudes in Israel and Australia. *Journal of Refugee Studies*, 29(4), 583–606. <https://doi.org/10.1093/jrs/few012>
- Cohen, J. (1988). *Statistical power analysis for the behavioural sciences* (2. ed.). Erlbaum.
- Cosmides, L., Barrett, H. C., & Tooby, J. (2010). Adaptive specializations, social exchange, and the evolution of human intelligence. *Proceedings of the National Academy of Sciences*, 107(supplement_2), 9007–9014. <https://doi.org/10.1073/pnas.0914623107>
- Cosmides, L., & Tooby, J. (2015). Neurocognitive adaptations designed for social exchange. In *The Handbook of Evolutionary Psychology* (S. 584–627). John Wiley & Sons, Ltd. <https://doi.org/10.1002/9780470939376.ch20>
- Davidai, S., & Ongis, M. (2019). The politics of zero-sum thinking: The relationship between political ideology and the belief that life is a zero-sum game. *Science Advances*, 5(12), eaay3761. <https://doi.org/10.1126/sciadv.aay3761>
- de Koster, W., Achterberg, P., & van der Waal, J. (2013). The new right and the welfare state: The electoral relevance of welfare chauvinism and welfare populism in the Netherlands. *International Political Science Review*, 34(1), 3–20. <https://doi.org/10.1177/0192512112455443>
- Delton, A. W., Cosmides, L., Guemo, M., Robertson, T. E., & Tooby, J. (2012). The psychosemantics of free riding: Dissecting the architecture of a moral concept. *Journal of Personality and Social Psychology*, 102(6), 1252–1270. <https://doi.org/10.1037/a0027026>
- Destatis. (2021). *Migrationshintergrund*. Statistisches Bundesamt. Abgerufen 22. Oktober 2021, von <https://www.destatis.de/DE/Themen/Gesellschaft-Umwelt/Bevoelkerung/Migration-Integration/Glossar/migrationshintergrund.html>

- Ecker, U. K. H., & Ang, L. C. (2019). Political attitudes and the processing of misinformation corrections. *Political Psychology, 40*(2), 241–260. <https://doi.org/10.1111/pops.12494>
- EduNet. (2021). *Chapter 1: Anti-immigration attitudes: Concepts and measurements / ESS EduNet*. <http://essedunet.nsd.uib.no/cms/topics/immigration/1/>
- Eftedal, N. H., Kleppestø, T. H., Czajkowski, N. O., Sheehy-Skeffington, J., Røysamb, E., Vassend, O., Ystrom, E., & Thomsen, L. (2022). Justice sensitivity is undergirded by separate heritable motivations to be morally principled and opportunistic. *Scientific Reports, 12*(1), Article 1. <https://doi.org/10.1038/s41598-022-09253-2>
- Esses, V. M. (2021). Prejudice and discrimination toward immigrants. *Annual Review of Psychology, 72*(1), 503–531. <https://doi.org/10.1146/annurev-psych-080520-102803>
- Esses, V. M., Jackson, L. M., & Armstrong, T. L. (1998). Intergroup competition and attitudes toward immigrants and immigration: An instrumental model of group conflict. *Journal of Social Issues, 54*(4), 699–724. <https://doi.org/10.1111/j.1540-4560.1998.tb01244.x>
- Facchini, G., & Mayda, A. M. (2008). From individual attitudes towards migrants to migration policy outcomes: Theory and evidence. *Economic Policy, 23*(56), 652–713. <https://doi.org/10.1111/j.1468-0327.2008.00212.x>
- Faul, F., Erdfelder, E., Lang, A.-G., & Buchner, A. (2007). G*Power 3: A flexible statistical power analysis program for the social, behavioural, and biomedical sciences. *Behaviour Research Methods, 39*(2), 175–191. <https://doi.org/10.3758/BF03193146>
- Fehr, E., & Gächter, S. (2000). Fairness and retaliation: The economics of reciprocity. *Journal of Economic Perspectives, 14*(3), 159–181. <https://doi.org/10.1257/jep.14.3.159>
- Fetchenhauer, D., & Huang, X. (2004). Justice sensitivity and distributive decisions in experimental games. *Personality and Individual Differences, 36*(5), 1015–1029. [https://doi.org/10.1016/S0191-8869\(03\)00197-1](https://doi.org/10.1016/S0191-8869(03)00197-1)

- Geiges, L. (2018). Wie die AfD im Kontext der „Flüchtlingskrise“ mobilisierte. Eine empirisch-qualitative Untersuchung der „Herbstoffensive 2015“. *Zeitschrift für Politikwissenschaft*, 28(1), 49–69. <https://doi.org/10.1007/s41358-018-0126-3>
- Gerlach, T. M., Allemand, M., Agroskin, D., & Denissen, J. J. A. (2012). Justice sensitivity and forgiveness in close interpersonal relationships: The mediating role of mistrustful, legitimizing, and pro-relationship cognitions. *Journal of Personality*, 80(5), 1373–1413. <https://doi.org/10.1111/j.1467-6494.2012.00762.x>
- Gollwitzer, M., & Rothmund, T. (2009). When the need to trust results in unethical behaviour: The sensitivity to mean intentions (SeMI) model. In *Psychological perspectives on ethical behaviour and decision making* (S. 135–152). Information Age Publishing, Inc.
- Gollwitzer, M., & Rothmund, T. (2011). What exactly are victim-sensitive persons sensitive to? *Journal of Research in Personality*, 45(5), 448–455. <https://doi.org/10.1016/j.jrp.2011.05.003>
- Gollwitzer, M., Rothmund, T., Alt, B., & Jekel, M. (2012). Victim sensitivity and the accuracy of social judgments. *Personality and Social Psychology Bulletin*, 38(8), 975–984. <https://doi.org/10.1177/0146167212440887>
- Gollwitzer, M., Rothmund, T., Pfeiffer, A., & Ensenbach, C. (2009). Why and when justice sensitivity leads to pro- and antisocial behaviour. *Journal of Research in Personality*, 43(6), 999–1005. <https://doi.org/10.1016/j.jrp.2009.07.003>
- Gollwitzer, M., Rothmund, T., & Süßenbach, P. (2013). The sensitivity to mean intentions (SeMI) model: Basic assumptions, recent findings, and potential avenues for future research. *Social and Personality Psychology Compass*, 7(7), 415–426. <https://doi.org/10.1111/spc3.12041>

- Gollwitzer, M., Schmitt, M., Schalke, R., Maes, J., & Baer, A. (2005). Asymmetrical effects of justice sensitivity perspectives on prosocial and antisocial behaviour. *Social Justice Research, 18*(2), 183–201. <https://doi.org/10.1007/s11211-005-7368-1>
- Ho, A. K., Sidanius, J., Kteily, N., Sheehy-Skeffington, J., Pratto, F., Henkel, K. E., Foels, R., & Stewart, A. L. (2015). The nature of social dominance orientation: Theorizing and measuring preferences for intergroup inequality using the new SDO₇ scale. *Journal of Personality and Social Psychology, 109*(6), 1003–1028. <https://doi.org/10.1037/pspi0000033>
- Hogg, M. A. (2007). Social Identity and the Group Context of Trust: Managing Risk and Building Trust through Belonging; In *Trust in Risk Management*. Routledge.
- Jackson, J. W., & Poulsen, J. R. (2005). Contact Experiences Mediate the Relationship Between Five-Factor Model Personality Traits and Ethnic Prejudice. *Journal of Applied Social Psychology, 35*(4), 667–685. <https://doi.org/10.1111/j.1559-1816.2005.tb02140.x>
- Jacoby, J., & Sassenberg, K. (2011). Interactions do not only tell us when, but can also tell us how: Testing process hypotheses by interaction. *European Journal of Social Psychology, 41*(2), 180–190. <https://doi.org/10.1002/ejsp.762>
- Jetten, J., Mols, F., & Postmes, T. (2015). Relative deprivation and relative wealth enhances anti-immigrant sentiments: The v-curve re-examined. *PLOS ONE, 10*(10), e0139156. <https://doi.org/10.1371/journal.pone.0139156>
- Jolly, S. K., & DiGiusto, G. M. (2014). Xenophobia and immigrant contact: French public attitudes toward immigration. *The Social Science Journal, 51*(3), 464–473. <https://doi.org/10.1016/j.soscij.2013.09.018>
- Kim, O., & Walker, M. (1984). The free rider problem: Experimental evidence. *Public Choice, 43*(1), 3–24. <https://doi.org/10.1007/BF00137902>

- Little, R. J. A. (1988). A Test of Missing Completely at Random for Multivariate Data with Missing Values. *Journal of the American Statistical Association*, 83(404), 1198–1202.
<https://doi.org/10.1080/01621459.1988.10478722>
- Ma, Y., Dixon, G., & Hmielowski, J. D. (2019). Psychological reactance from reading basic facts on climate change: The role of prior views and political identification. *Environmental Communication*, 13(1), 71–86. <https://doi.org/10.1080/17524032.2018.1548369>
- Maes, J., & Schmitt, M. (1999). More on ultimate and immanent justice: Results from the research project “justice as a problem within reunified Germany”. *Social Justice Research*, 12(2), 65–78. <https://doi.org/10.1023/A:1022039624976>
- Mahfud, Y., Badea, C., Verkuyten, M., & Reynolds, K. (2018). Multiculturalism and attitudes toward immigrants: The impact of perceived cultural distance. *Journal of Cross-Cultural Psychology*, 49(6), 945–958. <https://doi.org/10.1177/0022022117730828>
- Maltese, S., Baumert, A., Schmitt, M. J., & MacLeod, C. (2016). How victim sensitivity leads to uncooperative behaviour via expectancies of injustice. *Frontiers in Psychology*, 6, 2059. <https://doi.org/10.3389/fpsyg.2015.02059>
- Meeus, J., Duriez, B., Vanbeselaere, N., & Boen, F. (2010). The role of national identity representation in the relation between in-group identification and out-group derogation: Ethnic versus civic representation. *British Journal of Social Psychology*, 49(2), 305–320. <https://doi.org/10.1348/014466609X451455>
- Meuleman, B., Abts, K., Schmidt, P., Pettigrew, T. F., & Davidov, E. (2020). Economic conditions, group relative deprivation and ethnic threat perceptions: A cross-national perspective. *Journal of Ethnic and Migration Studies*, 46(3), 593–611. <https://doi.org/10.1080/1369183X.2018.1550157>

- Nicolai, S., Franikowski, P., & Stoll-Kleemann, S. (2022). Predicting Pro-environmental Intention and Behavior Based on Justice Sensitivity, Moral Disengagement, and Moral Emotions – Results of Two Quota-Sampling Surveys. *Frontiers in Psychology, 13*.
<https://www.frontiersin.org/articles/10.3389/fpsyg.2022.914366>
- Ongis, M., & Davidai, S. (2021). Personal relative deprivation and the belief that economic success is zero-sum. *Journal of Experimental Psychology: General*, No Pagination Specified-No Pagination Specified. <https://doi.org/10.1037/xge0001144>
- Petersen, M. B., Sznycer, D., Cosmides, L., & Tooby, J. (2012). Who deserves help? Evolutionary psychology, social emotions, and public opinion about welfare. *Political Psychology, 33*(3), 395–418. <https://doi.org/10.1111/j.1467-9221.2012.00883.x>
- Pettigrew, T. F., Christ, O., Wagner, U., Meertens, R. W., Van Dick, R., & Zick, A. (2008). Relative deprivation and intergroup prejudice. *Journal of Social Issues, 64*(2), 385–401. <https://doi.org/10.1111/j.1540-4560.2008.00567.x>
- Reeskens, T., & van der Meer, T. (2019). The inevitable deservingness gap: A study into the insurmountable immigrant penalty in perceived welfare deservingness. *Journal of European Social Policy, 29*(2), 166–181. <https://doi.org/10.1177/0958928718768335>
- Reeskens, T., & van Oorschot, W. (2012). Disentangling the ‘New Liberal Dilemma’: On the relation between general welfare redistribution preferences and welfare chauvinism. *International Journal of Comparative Sociology, 53*(2), 120–139. <https://doi.org/10.1177/0020715212451987>
- Rothmund, T., Bromme, L., & Azevedo, F. (2020). Justice for the people? How justice sensitivity can foster and impair support for populist radical-right parties and politicians in the United States and in Germany. *Political Psychology, 41*(3), 479–497. <https://doi.org/10.1111/pops.12632>

- Rothmund, T., Stavrova, O., & Schlösser, T. (2017). Justice concerns can feed nationalistic concerns and impede solidarity in the Euro crisis: How victim sensitivity translates into political attitudes. *Social Justice Research, 30*(1), 48–71. <https://doi.org/10.1007/s11211-017-0280-7>
- Schmitt, M., Baumert, A., Gollwitzer, M., & Maes, J. (2010). The justice sensitivity inventory: factorial validity, location in the personality facet space, demographic pattern, and normative data. *Social Justice Research, 23*(2), 211–238. <https://doi.org/10.1007/s11211-010-0115-2>
- Schmitt, M., Gollwitzer, M., Maes, J., & Arbach, D. (2005). Justice sensitivity. *European Journal of Psychological Assessment, 21*(3), 202–211. <https://doi.org/10.1027/1015-5759.21.3.202>
- Schmitt, M., & Maes, J. (1998). Perceived injustice in unified Germany and mental health. *Social Justice Research, 11*(1), 59–78. <https://doi.org/10.1023/A:1022133020802>
- Schmitt, M., & Maes, J. (2002). Stereotypic ingroup bias as self-defense against relative deprivation: Evidence from a longitudinal study of the German unification process. *European Journal of Social Psychology, 32*(3), 309–326. <https://doi.org/10.1002/ejsp.91>
- Seifert, W. (2012). *Geschichte der Zuwanderung nach Deutschland nach 1950 | bpb*. bpb.de. <https://www.bpb.de/politik/grundfragen/deutsche-verhaeltnisse-eine-sozialkunde/138012/geschichte-der-zuwanderung-nach-deutschland-nach-1950>
- Sell, A., Tooby, J., & Cosmides, L. (2009). Formidability and the logic of human anger. *Proceedings of the National Academy of Sciences, 106*(35), 15073–15078. <https://doi.org/10.1073/pnas.0904312106>

- 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.
<https://doi.org/10.1037/0022-3514.89.6.845>
- Süssenbach, P., & Gollwitzer, M. (2015). Us(ed): The role of victim sensitivity in potentially exploitative intergroup relationships. *Group Processes & Intergroup Relations*, *18*(2), 241–255. <https://doi.org/10.1177/1368430214556700>
- Tajfel, H. (1970). Experiments in Intergroup Discrimination. *Scientific American*, *223*(5), 96–103.
- Tajfel, H., Billig, M. G., Bundy, R. P., & Flament, C. (1971). Social categorization and intergroup behaviour. *European Journal of Social Psychology*, *1*(2), 149–178.
<https://doi.org/10.1002/ejsp.2420010202>
- Thomsen, L., Green, E. G. T., & Sidanius, J. (2008). We will hunt them down: How social dominance orientation and right-wing authoritarianism fuel ethnic persecution of immigrants in fundamentally different ways. *Journal of Experimental Social Psychology*, *44*(6), 1455–1464. <https://doi.org/10.1016/j.jesp.2008.06.011>
- Titlestad, K., Snijders, T. A. B., Durrheim, K., Quayle, M., & Postmes, T. (2019). The dynamic emergence of cooperative norms in a social dilemma. *Journal of Experimental Social Psychology*, *84*, 103799. <https://doi.org/10.1016/j.jesp.2019.03.010>
- Traut-Mattausch, E., Guter, S., Zanna, M. P., Jonas, E., & Frey, D. (2011). When citizens fight back: Justice sensitivity and resistance to political reform. *Social Justice Research*, *24*(1), 25–42. <https://doi.org/10.1007/s11211-011-0125-8>

- Trede, O. (2015). Arbeitsmigration in den 1940er bis Frühen 1960er Jahren. In *Zwischen Misstrauen, Regulation und Integration* (S. 41–90). Ferdinand Schöningh.
https://doi.org/10.30965/9783657776672_004
- Velling, J. (1996). Die Migranten der 90er Jahre und ihre Integration in den deutschen Arbeitsmarkt. In L. Clausen (Hrsg.), *Gesellschaften im Umbruch: Verhandlungen des 27. Kongresses der Deutschen Gesellschaft für Soziologie in Halle an der Saale 1995* (S. 377–394). Campus Verl.
- Wilder, D. A., & Thompson, J. E. (1980). Intergroup contact with independent manipulations on in-group and out-group interaction. *Journal of Personality and Social Psychology*, 38(4), 589–603. <https://doi.org/10.1037/0022-3514.38.4.589>
- Winograd, S. (2021). The radicalization of the far-right in Germany and regional disparities in support. *Dartmouth Undergraduate Journal of Politics, Economics and World Affairs*, 1(3). <https://digitalcommons.dartmouth.edu/dujpew/vol1/iss3/4>
- Witkin, H. A. (1971). *A manual for the embedded figures tests*. Consulting Psychologists Press.

Tables and Figures

Table 1

Descriptive statistics and reliability measures (Study 1)

Study Variables	Time 1 (1996)			Time 2 (1998)			Cohen's <i>d</i>
	<i>M</i>	<i>SD</i>	α	<i>M</i>	<i>SD</i>	α	
Victim	2.69	1.02	.89	2.58	1.02	.91	0.11
Observer	2.90	1.01	.92	2.71	1.05	.94	0.18
Beneficiary	2.80	1.08	.92	2.62	1.10	.93	0.17
Authoritarianism	1.97	.92	.80	1.92	.91	.81	0.05
Anti-Immigration	1.30	1.65	-	1.41	1.66	-	-0.06

Note. The last column provides Cohen's *d* as an effect size for the observed mean difference between the two measurement occasions (positive values indicate a decrease over time).

Table 2*Zero-order correlations of the study variables at both measurement occasions (Study 1)*

Study Variables		A	B	C	D	E	F	G	H	I	J
Victim Sensitivity T1	(A)	1									
Victim Sensitivity T2	(B)	.67**	1								
Observer Sensitivity T1	(C)	.46**	.31**	1							
Observer Sensitivity T2	(D)	.28**	.49**	.62**	1						
Beneficiary Sensitivity T1	(E)	.26**	.17**	.68**	.49**	1					
Beneficiary Sensitivity T2	(F)	.20**	.32**	.50**	.69**	.62**	1				
Right-Wing Authoritarianism T1	(G)	.20**	.20**	.17**	.18**	.10**	.14**	1			
Right-Wing Authoritarianism T2	(H)	.20**	.26**	.13**	.21**	.08*	.13**	.73**	1		
Anti-Immigration Attitudes T1	(I)	.12**	.10**	.04	.01	-.01	-.00	.37**	.37**	1	
Anti-Immigration Attitudes T2	(J)	.17**	.16**	.05	.07	-.01	.03	.37**	.38**	.69**	1

Note. $N = 1.038$. ** $p < .01$; * $p < .05$.

Table 3*Descriptive statistics and reliability measures of the study variables (Study 2)*

Study variables	N	Min.	Max.	<i>M</i>	<i>SD</i>	α
Victim Sensitivity	299	1	6	3.81	.84	.86
Observer Sensitivity	299	2	6	4.01	.82	.88
Perpetrator Sensitivity	296	3	6	4.85	.75	.87
Beneficiary Sensitivity	299	2	6	3.85	.92	.89
Right-Wing Authoritarianism	295	1	6	2.56	.89	.85
Social Dominance Orientation	294	1	5	2.28	.86	.89
Anti-Immigration Attitudes	247	1	6	2.54	.96	.93

Note. Response scales vary across measures.

Table 4

Correlations of the study variables and control variables in the control condition: Exploitation not invalidated (Study 2)

Study Variables		A	B	C	D	E	F	G	H	I
Victim Sensitivity	(A)	1								
Observer Sensitivity	(B)	.37**	1							
Beneficiary Sensitivity	(C)	.24*	.68**	1						
Perpetrator Sensitivity	(D)	.01	.48**	.66**	1					
RWA	(E)	.23*	.03	.05	-.10	1				
SDO	(F)	-.01	-.32**	-.17	-.32**	.46**	1			
Political Orientation	(G)	.14	-.30	-.18	-.25*	.37**	.53**	1		
Exploitation	(H)	.30**	-.06	-.11	-.16	.27*	.28*	.22	1	
Anti-Immigration	(I)	.23*	-.27*	-.23*	-.31**	.45**	.59**	.59**	.51**	1

Note. $N = 80$ ** $p < .01$; * $p < .05$.

Table 5*Correlations of the study variables and control variables in the experimental condition 1: Exploitation invalidated (Study 2)*

Study Variables		A	B	C	D	E	F	G	H	I
Victim Sensitivity	(A)	1								
Observer Sensitivity	(B)	.38**	1							
Beneficiary Sensitivity	(C)	.22*	.64**	1						
Perpetrator Sensitivity	(D)	-.02	.54**	.68**	1					
RWA	(E)	.06	-.16	-.25*	-.25*	1				
SDO	(F)	-.02	-.38**	-.29**	-.24*	.47**	1			
Political Orientation	(G)	.10	-.27**	-.18	-.23*	.52**	.43**	1		
Exploitation	(H)	.09	-.16	-.18	-.31**	.35**	.24*	.37**	1	
Anti-Immigration	(I)	.11	-.33**	-.39**	-.48**	.52**	.45**	.48**	.60**	1

Note. $N = 85$. ** $p < .01$; * $p < .05$.

Table 6

Correlations of the study variables and control variables in the experimental condition 2: Exploitation countered (Study 2)

Study Variables		A	B	C	D	E	F	G	H	I
Victim Sensitivity	(A)	1								
Observer Sensitivity	(B)	.43**	1							
Beneficiary Sensitivity	(C)	.24*	.67**	1						
Perpetrator Sensitivity	(D)	.06	.43**	.66**	1					
RWA	(E)	.19	-.06	-.08*	-.09	1				
SDO	(F)	.07	-.15	-.23**	-.20	.58**	1			
Political Orientation	(G)	-.12	-.25*	-.15	-.16	.48**	.54**	1		
Exploitation	(H)	.07	-.14	-.15	-.18	.49**	.40**	.27*	1	
Anti-Immigration	(I)	.11	-.19**	-.14	-.18	.70**	.64**	.58**	.66**	1

Note. $N=82$. ** $p < .01$; * $p < .05$.

Table 7*Hierarchical Regression Analysis of Predictors of Anti-Immigration Attitudes (Study 2)*

Step	Predictor Variables	β	t	p
1	Age	.07	1.35	.18
	Gender	-.04	-.74	.46
	Political Orientation	.27	4.49	.00
	Right-Wing Authoritarianism	.30	5.26	.00
	Social Dominance Orientation	.26	4.50	.00
	Contact to Immigrants	.01	.30	.76
2	Victim Sensitivity	.16	2.94	.00
	Observer Sensitivity	-.09	-1.39	.17
	Perpetrator Sensitivity	-.15	-2.28	.02
	Beneficiary Sensitivity	-.02	-.23	.82
	Contrast 1: Exploitation Invalidated	.02	.33	.74
	Contrast 2: Exploitation Countered	.06	1.34	.18
3	Victim Sensitivity x Exploitation Invalidated	-.03	-.65	.52
	Victim Sensitivity x Exploitation Countered	-.03	-.53	.60

Note. $N = 299$. Study variables are standardized.

Table 8*Hierarchical Regression Analysis of Predictors of Trustworthiness Perceptions (Study 2.1)*

Step	Predictor Variables	β	t	p
1	Age	.01	.08	.93
	Gender	.05	.68	.49
2	Victim Sensitivity	-.14	-1.86	.07
	Observer Sensitivity	.12	1.48	.14
	Perpetrator Sensitivity	.12	1.58	.12
	Beneficiary Sensitivity	-.03	-.36	.72
	Contrast 1: Exploitation Invalidated	.19	1.92	.06
	Contrast 2: Exploitation Countered	.03	.34	.73
3	Victim Sensitivity x Exploitation Invalidated	.12	1.72	.09
	Victim Sensitivity x Exploitation Countered	-.02	-.22	.83

Note. $N = 209$. Study variables are standardized.

Table 9*Descriptive statistics and reliability measures of the study variables (Study 3)*

Study variables	N	Min.	Max.	<i>M</i>	<i>SD</i>	α
Victim Sensitivity	178	2	6	4.00	.74	.78
Observer Sensitivity	178	2	6	4.13	.86	.87
Perpetrator Sensitivity	178	2	6	4.75	.86	.89
Beneficiary Sensitivity	178	1	6	4.01	.97	.89
Right-Wing Authoritarianism	178	1	5	2.52	.76	.79
Social Dominance Orientation	178	1	4	2.25	.77	.87
Anti-Immigration Attitudes T1	178	1	6	3.30	1.39	.79
Perceived Exploitation T1	178	1	7	3.75	1.90	-
Prosocial Behaviour T1	178	1	10	6.46	3.02	-

Note. Response scales vary across measures.

Table 10*Correlations of the study variables and control variables in the overall sample (Study 3)*

Study Variables		A	B	C	D	E	F	G	H	I	J
Victim Sensitivity	(A)	1									
Observer Sensitivity	(B)	.28**	1								
Beneficiary Sensitivity	(C)	-.01	.52**	1							
Perpetrator Sensitivity	(D)	.01	.54**	.65**	1						
RWA	(E)	.13	-.16*	-.20**	-.20**	1					
SDO	(F)	.02	-.29**	-.26**	-.26**	.54**	1				
Political Orientation	(G)	.05	-.17*	-.17*	-.15*	.55**	.41**	1			
Anti-Immigration T1	(H)	.40**	-.08	-.26**	-.26**	.26**	.25**	.14	1		
Perceived Exploitation T1	(I)	.07	-.21**	-.08	-.11	.18*	.17*	.11	.30**	1	
Prosocial Behaviour T1	(J)	-.27**	.19*	.33**	.26**	-.39**	-.35**	-.31**	-.53**	-.29**	1

Note. $N = 178$. ** $p < .01$; * $p < .05$

Table 11

Correlations of the study variables and control variables in the control condition: Exploitation not invalidated (Study 3)

Study Variables		A	B	C	D	E	F	G	H	I	J	K	L	M
Victim Sensitivity	(A)	1												
Observer Sensitivity	(B)	.36**	1											
Beneficiary Sensitivity	(C)	-.15	.30*	1										
Perpetrator Sensitivity	(D)	.02	.30*	.56**	1									
RWA	(E)	.14	-.36**	-.37**	-.34**	1								
SDO	(F)	.10	-.29**	-.36**	-.35**	.61*	1							
Political Orientation	(G)	.14	-.30*	-.17	-.26*	.63**	.50**	1						
Anti-Immigration T1	(H)	.43**	.02	-.25	-.39**	.30*	.29**	.15	1					
Anti-Immigration T2	(I)	.36**	.00	-.23	-.31*	.39**	.44**	.28*	.75**	1				
Perceived Exploitation T1	(J)	.21	-.13	-.18	-.27*	.25	.10	.11	.42**	.21	1			
Perceived Exploitation T2	(K)	.15	-.13	-.15	-.18	.27	.14	.13	.36**	.33*	.79**	1		
Prosocial Behaviour T1	(L)	-.24	.16	.28*	.25	-.44**	-.48**	-.42**	-.42**	-.55**	-.09	-.26*	1	
Prosocial Behaviour T2	(M)	-.16	.18	.29*	.22	-.45**	-.51**	-.35**	-.39**	-.60**	-.09	-.28*	.89**	1

Note. $N = 60$. ** $p < .01$; * $p < .05$

Table 12

Correlations of the study variables and control variables in the experimental condition: Exploitation invalidated (Study 3)

Study Variables		A	B	C	D	E	F	G	H	I	J	K	L	M
Victim Sensitivity	(A)	1												
Observer Sensitivity	(B)	.24	1											
Beneficiary Sensitivity	(C)	-.07	.68**	1										
Perpetrator Sensitivity	(D)	-.11	.69**	.76**	1									
RWA	(E)	.22	.01	.02	.00	1								
SDO	(F)	.05	-.23	-.13	-.21	.48**	1							
Political Orientation	(G)	.03	-.11	-.11	-.06	.59**	.33**	1						
Anti-Immigration T1	(H)	.37**	-.28*	-.33**	-.34**	.30*	.26*	.23	1					
Anti-Immigration T2	(I)	.24	-.21	-.19	-.19	.28*	.13	.20	.77**	1				
Perceived Exploitation T1	(J)	.00	-.27*	-.04	-.02	.13	.34**	.18	.35**	.20	1			
Perceived Exploitation T2	(K)	-.06	-.18	.11	.16	.16	.17	.19	.20	.34**	.75**	1		
Prosocial Behaviour T1	(L)	-.21	.26*	.34**	.30*	-.28*	-.34**	-.29*	-.62**	-.59**	-.51**	-.38**	1	
Prosocial Behaviour T2	(M)	-.12	.23	.23	.30*	-.38**	-.30*	-.25	-.56**	-.67**	-.32*	-.36**	.85**	1

Note. $N = 61$. ** $p < .01$; * $p < .05$

Table 13

Correlations of the study variables and control variables in the experimental condition: Exploitation Countered (Study 3)

Study Variables		A	B	C	D	E	F	G	H	I	J	K	L	M
Victim Sensitivity	(A)	1												
Observer Sensitivity	(B)	.27*	1											
Beneficiary Sensitivity	(C)	.23	.48**	1										
Perpetrator Sensitivity	(D)	.12	.57**	.65**	1									
RWA	(E)	.02	-.17	-.34*	-.31*	1								
SDO	(F)	-.13	-.37**	-.32*	-.30*	.56**	1							
Political Orientation	(G)	.00	-.14	-.30*	-.15	.41**	.48**	1						
Anti-Immigration T1	(H)	.39**	.05	-.18	-.08	.17	.19	.05	1					
Anti-Immigration T2	(I)	.13	-.19	-.36**	-.33*	.45**	.50**	.15	.42**	1				
Perceived Exploitation T1	(J)	.02	-.21	-.07	-.03	.16	.08	.06	.14	.18	1			
Perceived Exploitation T2	(K)	-.18	-.24	-.26	-.01	.18	.29*	.22	-.05	.33*	.68**	1		
Prosocial Behaviour T1	(L)	-.40**	.13	.38**	.22	-.46**	-.26	-.24	-.51**	-.52**	-.24	-.15	1	
Prosocial Behaviour T2	(M)	-.21	.18	.40**	.31*	-.46**	-.44**	-.35**	-.24	-.72**	-.24	-.42**	.74**	1

Note. $N = 57$. ** $p < .01$; * $p < .05$

Table 14*Hierarchical regression analyses on the dependent variables (Study 3)*

Predictors	Prosocial Behaviour	Anti-Immigration	Perceived Exploitation
Step 1			
Age	.10	-.01	-.07
Gender	.05	.06	.07
Political Orientation	.03	.07	.12
Social Dominance Orientation	-.15	-.02	-.01
Right-Wing Authoritarianism	-.17	.09	-.02
Observer Sensitivity	.03	-.08	.03
Beneficiary Sensitivity	-.37	.19	-.14
Perpetrator Sensitivity	.33	-.05	.30
R^2	.06	.03	.04
Step 2			
Contrast 1: Exploitation Invalidated	.35**	-.27*	-.18*
Contrast 2: Exploitation Countered	.28**	-.18	-.08
Victim Sensitivity	.37*	-.24*	-.20
R^2	.17	.19	.10
Step 3			
Victim Sensitivity x Exploitation Invalidated	.09	-.09	-.02
Victim Sensitivity x Exploitation Countered	.14	-.11	-.14
R^2	.18	.20	.10

Note. $N = 178$. ** $p < .01$; * $p < .05$. The dependent variables are difference values (T2 – T1). Positive coefficients represent an increase at T2 (after the manipulation). Not including control variables yields the same results.

Table 15

Hierarchical regression analyses on the dependent variables at time 2 in the control condition: Exploitation not invalidated (Study 3)

Predictors	Prosocial Behaviour	Anti-Immigration	Perceived Exploitation
Step 1			
Age	.03	-.01	-.01
Gender	.25	.03	.27
Political Orientation	-.26	.03	.15
Social Dominance Orientation	-.56*	.18	.10
Right-Wing Authoritarianism	-.81**	.32**	.22
Observer Sensitivity	-.10	.14	-.37*
Beneficiary Sensitivity	.35	-.07	-.02
Perpetrator Sensitivity	.43	-.30*	.31
R^2	.22	.16	.05
Step 2			
Victim Sensitivity	-.46*	.32**	.08
R^2	.26	.26	.07

Note. $N = 60$. ** $p < .01$; * $p < .05$. The dependent variables are measures at time 2 (after the manipulation).

Table 16*Hierarchical regression analyses on the dependent variables at time 2 (Study 3)*

Predictors	Prosocial Behaviour	Anti-Immigration	Perceived Exploitation
Step 1			
Age	.06	-.07	-.05
Gender	.04	.01	.08
Political Orientation	-.08	.02	.08
Social Dominance Orientation	-.17*	.14	.05
Right-Wing Authoritarianism	-.25*	.24*	.12
Observer Sensitivity	-.03	.11	-.20*
Beneficiary Sensitivity	.11	-.05	-.01
Perpetrator Sensitivity	.13	-.23*	.17
<i>R</i> ²	.26	.19	.09
Step 2			
Contrast 1: Exploitation Invalidated	.13*	-.20**	-.12*
Contrast 2: Exploitation Countered	.11	-.13	-.15
Victim Sensitivity	-.14*	.24**	.04
<i>R</i> ²	.30	.30	.13
Step 3			
Victim Sensitivity x Exploitation Invalidated	-.03	-.05	-.08
Victim Sensitivity x Exploitation Countered	-.15	.04	-.05
<i>R</i> ²	.31	.31	.14

Note. $N = 178$. ** $p < .01$; * $p < .05$. The dependent variables are measures at time 2 (after the manipulation).

Not including control variables yields the same results.

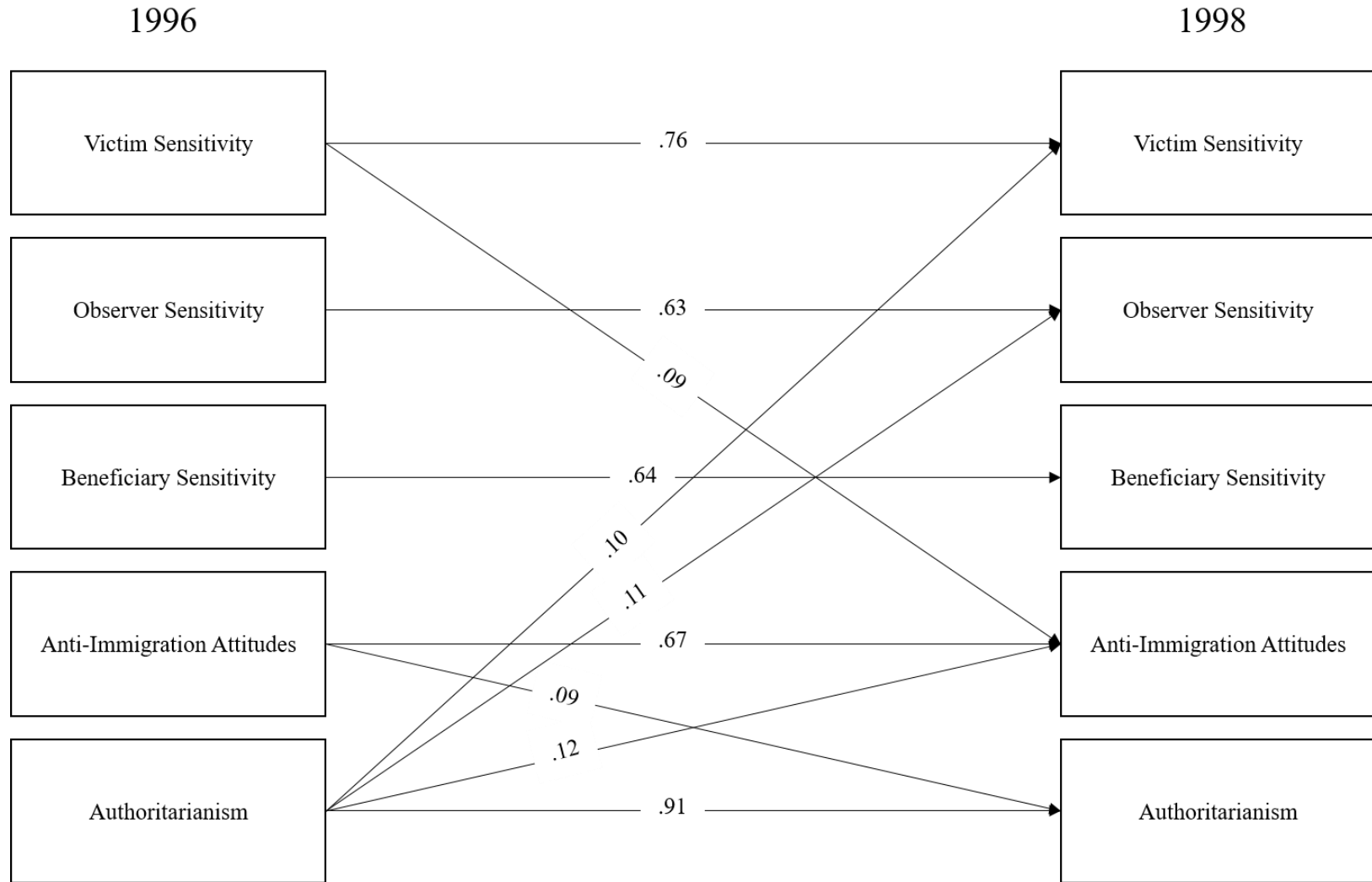


Figure 1. Cross-lagged effects of study variables between 1996 and 1998. The figure includes standardised values.

Note. Only significant paths ($p < .05$) are displayed.

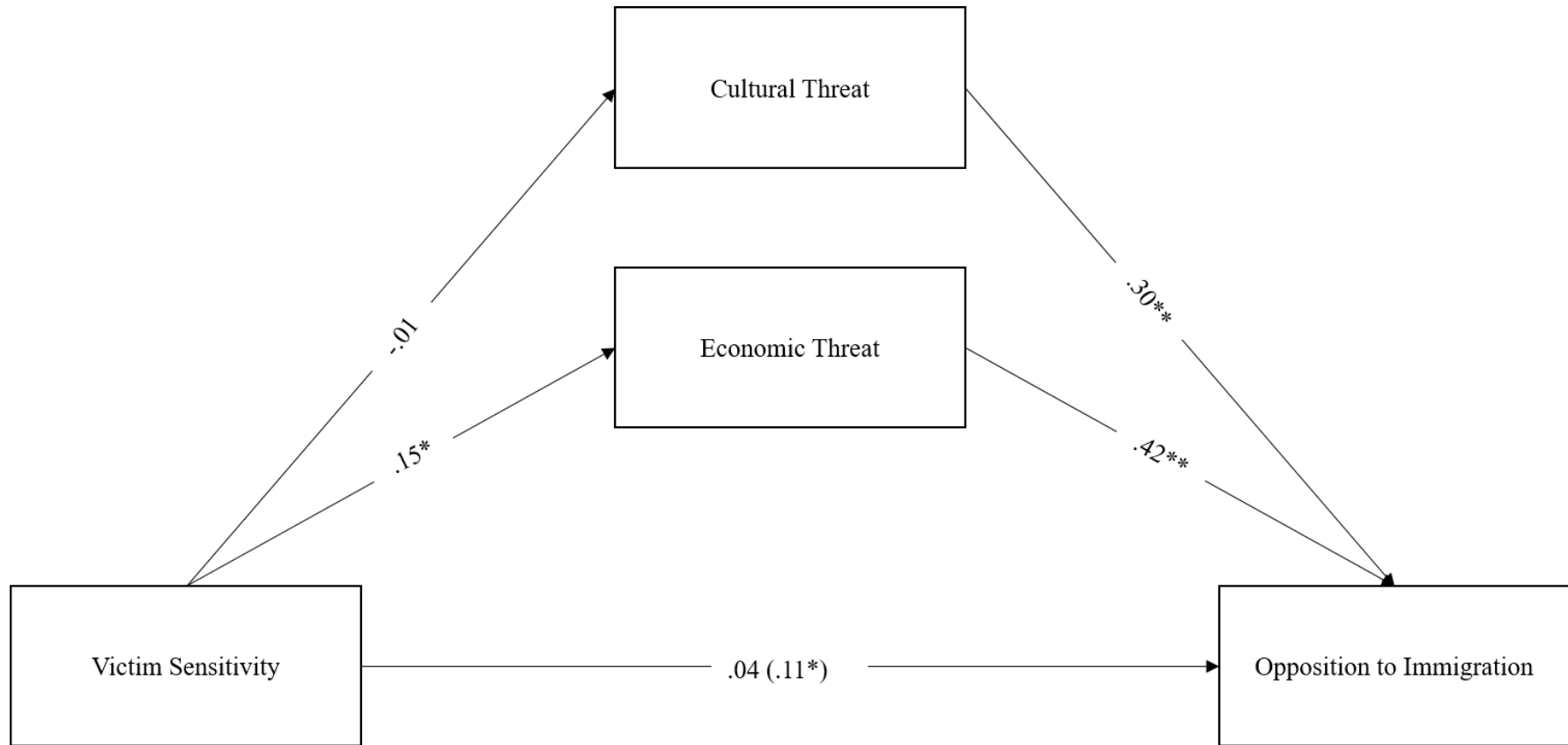


Figure 2. Standardised regression coefficients for the relationship between victim sensitivity and opposition to immigration as mediated by economic threat and cultural threat. The total effect of victim sensitivity on opposition to immigration reported in paratheses.

** $p < .01$

* $p < .05$

8. Manuscript 3: Victim Sensitivity and Pro-Environmental Engagement

Why Should I?

How Victim Sensitivity Affects Pro-Environmental Engagement

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Data availability statement:

The data collected for this research project are available at <https://osf.io/hmc5s>

Abstract

Perceiving injustice is a reliable predictor of pro-environmental engagement; however, research on the relation between justice-related personality facets and pro-environmental engagement is scarce. Based on theoretical considerations and prior research, we suggest that victim sensitivity – the sensitivity to self-related injustice – triggers two distinct psychological processes that can promote or impede pro-environmental engagement. Studies 1 ($N = 386$) and 2 ($N = 617$) tested the hypothesis that people high in victim sensitivity show increased pro-environmental engagement when they feel personally disadvantaged by climate change consequences. Study 3 ($N = 278$) tested the hypothesis that victim-sensitive individuals show decreased pro-environmental engagement due to a heightened fear of being exploited. The results of these three studies do, by and large, not support our theoretical reasoning. We discuss challenges in experimentally scrutinizing the psychological processes, theoretical and methodological insights, and possible avenues for future research.

[141 words]

Keywords: Victim sensitivity, pro-environmental engagement, climate change, victimization, fear of exploitation

Introduction

The climate crisis stands as one of the most urgent global challenges of our time. Abundant evidence underscores the need for decisive action to curtail the far-reaching impacts of climate change. Since human actions constitute the primary driver of this crisis, addressing it demands a profound shift in human behaviours on a large scale (Intergovernmental Panel on Climate Change [IPCC], 2023). Thus, comprehending the psychological underpinnings of pro-environmental behaviours in our daily lives, encompassing consumption and mobility, as well as inclinations toward pro-environmental policy support and active engagement, becomes pivotal.

Beyond its environmental consequences, climate change is increasingly recognized as a matter of (in)justice. Due to its multi-faceted impacts on our social life, politics, and the natural environment, climate change is associated with various justice principles. This includes cost and benefit allocations, for instance between the global North and the global South (distributive justice), opportunities for participation and raising “voice” in political decision-making processes (procedural justice), or the adherence to proper codes of conduct when communicating with other parties, for instance, across cultures (interactional injustice) (see IPCC, 2023). The climate crisis has also sparked questions of intergenerational justice. Younger generations perceive injustice as their lives will be more strongly affected by climate change consequences than those of older generations — this feeling is exacerbated by the perception that older generations bear more responsibility for climate change than younger generations (e.g., Knappe & Renn, 2022; Reese & Jacob, 2015). Movements around the world indicate that restoring “climate justice” — an umbrella term for the justice-related challenges posed by climate change — has become one of the main motives for political engagement. For instance, in its official declaration, “Fridays for Future”¹⁴, presently one of the largest pro-

¹⁴ Fridays for Future is a youth-led and organised global climate strike movement that started in 2018, when Greta Thunberg began a school strike for climate.

environmental movements worldwide, calls for “climate justice and equity” (Fridays for Future, 2023).

Research on collective action supports the idea that perceived injustice drives political engagement. Specifically, the Social Identity Model of Collective Action (SIMCA; e.g., van Zomeren et al., 2008, 2011) postulates that perceived injustice, group identification, and efficacy beliefs represent the key correlates of collective action, including protest behaviour as well as supporting initiatives and policies (e.g., Agostini & van Zomeren, 2021; Thomas et al., 2020). SIMCA conceptualizes injustice in terms of group-based deprivation (GBD; Pettigrew et al., 2008; Cook et al., 1977; Guimond & Dubé-Simard, 1983)—the perception that one’s in-group is unfairly deprived of essential (material or symbolic) resources compared to other groups. Next to objective criteria, such as inequalities and structural disadvantages (see also Kawakami & Dion, 1993; Leach, 2002) group identification is suggested as one of the main drivers of GBD (e.g., Thomas et al., 2012). For instance, in the context of climate activism, it was shown that the identification with the “Extinction Rebellion” movement mediated the relationship between perceived injustice and collective environmental action and intentions (Furlong & Vignoles, 2021).

Notably, research in the social justice domain has shown that individuals reliably differ in their sensitivity to perceived injustice (Schmitt et al., 2005), and empirical insights indicate that these differences can either promote or impede political engagement (Rothmund et al., 2014; Traut-Mattausch et al., 2011). A closer look at justice sensitivity should therefore provide novel insights regarding the association between perceived injustice and pro-environmental engagement.

Justice Sensitivity

Justice sensitivity (JS) is a personality construct, which describes individual differences in how sensitively individuals react to (potential) injustice (Baumert & Schmitt, 2016). While some people frequently perceive injustice in their environment and react more

strongly to it, others are less concerned. Interindividual differences in JS are relatively stable across time, situational contexts, and across different principles of injustice, including distributive, retributive, and procedural injustice (see Schmitt et al., 2005). Importantly, people can be sensitive to injustice from four different perspectives (Schmitt et al., 2010): from the perspective of a victim (victim sensitivity), a neutral observer (observer sensitivity), an active perpetrator (perpetrator sensitivity), or a passive beneficiary of injustice (beneficiary sensitivity).

Various studies have shown that the three “other-oriented” JS facets—observer, beneficiary, and perpetrator sensitivity—are positively intercorrelated, but that they are only weakly correlated with victim sensitivity (VS)—the most “self-oriented” JS facet (e.g., Schmitt et al., 2005; Thomas et al., 2011). Indeed, studies found that the other-oriented JS facets are correlated with pro-social dispositions, including role-taking, empathy, and social responsibility. Victim sensitivity, on the other hand, is associated with self-related concerns, including paranoia, suspiciousness, and jealousy (Schmitt et al., 2005). Looking at behavioural tendencies, studies have reliably shown that the other-oriented JS facets are associated with pro-social behaviours, including solidarity with the disadvantaged and equal-split offers in economic games. Conversely, victim-sensitive individuals show anti-social behavioural tendencies, including egoistic choices in social dilemmas and even delinquent behaviour (Fetchenhauer & Huang, 2004; Gollwitzer et al., 2005). Taken together, these findings indicate that whereas the other-oriented JS perspectives represent a genuine and principled concern for justice, victim sensitivity reflects a more self-oriented justice concern (Gollwitzer et al., 2013).

Victim Sensitivity and Political Engagement

Victim Sensitivity can be described as a dispositional sensitivity to being disadvantaged (Gollwitzer et al., 2013). When people high in VS perceive that they have been (or might be) disadvantaged, they react defensively and uncooperatively. The social-cognitive

and motivational processes underlying VS can be seen as self-protective tendencies to avoid victimization (Gollwitzer & Rothmund, 2009). For instance, in uncertain social situations, victim-sensitive individuals attend more strongly to untrustworthiness cues than to trustworthiness cues (Gollwitzer et al., 2012) and their disproportionate sensitivity to contextual cues signaling potential unjust treatment feeds into a “suspicious mindset.” This social-cognitive schema consists of a strong motivation to avoid being exploited, a hostile attribution bias, and a tendency to rationalize, justify, and legitimize one’s own anti-social behaviour (e.g., Gollwitzer & Rothmund, 2009; Maltese et al., 2016).

Societal crises and changes represent particularly daunting challenges for victim-sensitive individuals as victimization can occur in many ways. For instance, in the context of the “Euro crisis”¹⁵, people high in VS (vs. people low in VS) were less likely to endorse financial support for more afflicted countries (by less afflicted ones) when this support was framed as “exploitative” (vs. as an act of solidarity; Rothmund et al., 2017). Similarly, in the context of immigration, studies demonstrated that people high in VS (vs. people low in VS) expressed anti-social attitudes and behaviours as well as anger towards immigrants when cues suggested that immigrants might harbour exploitative intentions (Köhler & Gollwitzer, 2024; Süssenbach & Gollwitzer, 2015). Additionally, in the context of a health care reform, physicians high in VS showed increased reactance and a stronger inclination to block the policy compared to physicians low in VS after they were asked to think about the personal consequences of this reform (Traut-Mattausch et al., 2011, Study 1). Research on the link between VS and political engagement further support these findings. For instance, in the concrete case of a political decision regarding the public transport project “Stuttgart 21” in Germany, VS negatively predicted political protest (Rothmund et al., 2014). This was

¹⁵ The “Euro Crisis” was a debt crisis in the European Union (EU) from 2009 until 2014, during which several member states were unable to repay or refinance their government debt or to bail out over-indebted banks without the assistance of other member states, the European Central Bank or the International Monetary Fund.

explained by the finding that people high in VS primarily hold self-oriented concerns and are less inclined to engage in activities that promote the benefit of others or the general public (see also Gollwitzer & Rothmund, 2011; Rothmund et al., 2011). Findings in the context of climate action corroborate this, showing that VS was associated with moral disengagement regarding climate change consequences, which, in turn, negatively predicted pro-environmental behaviour (Nicolai et al., 2022).

Victim Sensitivity and Pro-Environmental Engagement

The findings reviewed here consistently suggest that people high in VS are less willing to engage for a collective good (such as pro-environmental engagement) than people low in VS. Yet, this does not necessarily mean that the relation between VS and pro-environmental engagement is written in stone. There may be conditions under which the negative effect of VS on pro-environmental engagement is weaker or can even become positive. Exploring these conditions is the aim of the current research. More precisely, we will discuss two potential “pathways of self-protection,” which may explain the psychological processes that promote or impede (pro-environmental) collective engagement among victim-sensitive individuals. The first pathway, which we refer to as the “active protection pathway,” pertains to perceived *direct* victimization. Based on the idea that victim-sensitive individuals are particularly vigilant towards personal losses or disadvantages (e.g., Schmitt & Mohiyeddini, 1996), a perception that can trigger collective action (e.g., Furlong & Vignoles, 2021; Keshavarzi et al., 2021; Nguyen et al., 2021; Traut-Mattausch et al., 2011), people high in VS should be inclined to *actively* protect themselves against personal disadvantages. Importantly, this also means that people high (vs. low) in VS should only be motivated to act against the climate crisis when the consequences of that crisis are perceived as self-relevant. Thus, becoming active to protect oneself from a possible disadvantage due to the climate crisis can, for instance, include engaging in pro-environmental policy support and protest behaviour aimed at mitigating climate change consequences.

Secondly, we can identify a “passive protection pathway.” Collective engagement can be seen as a social dilemma, in which political action is a form of investment into the public good (e.g., Heckathorn 1996; Irwin & Simpson, 2013; Raub & Snijders, 1997). As explained earlier, individuals high in VS are specifically sensitive to social exchange scenarios as they harbour a dispositional fear of being exploited by others, and thus, tend to behave “pre-emptively selfish” (Gollwitzer & Rothmund, 2009; Gollwitzer et al., 2013; Gollwitzer et al., 2021). This psychological process can explain why studies found disengaging tendencies of people high in VS (Rothmund et al., 2014; Nicolai et al., 2022). This means that, by being passive, high-VS individuals seek to protect themselves against exploitation. Considering this theoretical reasoning, we assume that high-VS individuals will show *decreased* pro-environmental engagement when cues of exploitation by others are present (“passive protection”).

The Present Research

In the current research project, we aimed to investigate the two proposed “pathways of self-protection” as underlying processes explaining the effects of VS on pro-environmental engagement. In the first two studies, we examined the “active protection pathway”: We predicted a positive effect of VS on pro-environmental engagement (policy support and protest behaviour) when consequences of climate change are framed as self-relevant (vs. non-self-relevant). In Study 3, we examined the “passive protection pathway”: We predicted a negative effect of VS on pro-environmental engagement when cues of exploitation by others are present (and not invalidated). We predicted that this negative effect should be diminished (or even reversed) when the fear of exploitation has been (experimentally) removed. For all three studies, the anonymized data, codebooks, analysis scripts, and study materials are available in the supplementary online material (“SOM”; <https://osf.io/hmc5s>).

STUDY 1

“In Study 1, we hypothesized that the effect of VS on participants’ support for a pro-environmental policy aimed at mitigating climate change consequences is positive when these consequences are self-relevant.” To this end, we used data from a vignette study, which originally aimed at testing the effects of topic-related framings of a climate change policy on policy support (see SOM, “Study 1”). We used these experimental variations to test the effect of a self-relevance (vs. no self-relevance) framing. We expected a positive interaction effect between VS and the framing manipulation.

Methods

Sample

Participants were invited to participate in an online survey using university mailing lists and online sampling portals. Participation requirements were a minimum age of 16 years and a good proficiency of the German language. Age ranged from 16 to 83 years ($M = 36.95$, $SD = 15.77$). Among those participants who responded to this particular question, 45% said they were employed, 15% were unemployed, and 40% were students. For the current study, a sensitivity power analysis was performed using G*Power (Faul et al., 2007) to estimate the minimum detectable effect size with the current sample size ($N = 386$). Assuming an alpha of .05 and a power of .90, the population effect must be $f^2 \geq .03$ to be detected with this sample size. Past research, which also tested an interaction effect between VS and a news media framing manipulation found a small to moderate effect ($f^2 = .06$; Rothmund et al., 2017). Therefore, we considered our sample size to be sufficient to detect a reasonable effect.

Procedure

At the start of the online study, all participants were introduced to a fictitious political initiative that aimed at promoting a pro-environmental policy. In an introductory text, the pro-environmental initiative “Urban Climate” called for implementing a mandatory “environmental service day,” at which citizens work for projects aimed at urban sustainability

and climate neutrality at least one day a year. The introductory text ended by stating that a flyer advocating for this policy would follow on the next page. Participants were randomly assigned to one of three versions of the flyer (see SOM, “Study 1”). In all three conditions, the flyer was titled “A day for the climate - We demand mandatory pro-environmental action!” In the *ecological* condition ($n = 126$), the flyer continued by stating that climate change was a big ecological challenge and that collective action was necessary to prevent negative consequences for biodiversity. In the *economic* condition ($n = 129$), the flyer continued by stating that climate change was a big economic challenge and that collective action was necessary to prevent negative consequences for the economy. In the *social justice* condition ($n = 131$), the flyer continued by stating that climate change was a big challenge for social justice and that collective action was necessary to prevent unjust consequences for the inhabitants “of our city.” The crucial difference between the three conditions was that only the latter (“social justice”) implied that consequences were “self-relevant” in the sense that these consequences affected all citizens, including (allegedly) participants. The two former conditions (“ecological,” “economic”) did not mention such consequences. After reading the flyer, participants were asked to complete a comprehension check and to answer a battery of questions.

Materials

Descriptive statistics and reliability estimates are reported in Table 1. We only report measures that are directly relevant for the present manuscript. For a complete overview of the study material, see Supplementary Online Material (“Study 1”).

Justice Sensitivity. The four justice sensitivity perspectives (victim, observer, beneficiary, and perpetrator sensitivity) were assessed using the 8-item Justice Sensitivity short scale (Baumert et al., 2014). Example items include, “It makes me angry when others are undeservingly better off than me” (victim), “I am upset when someone is undeservingly worse off than others” (observer), “I feel guilty when I am better off than others for no

reason” (beneficiary) and “I feel guilty when I enrich myself at the cost of others” (perpetrator). Items were rated on a 6-point response scale ranging from 1 = not at all true to 6 = absolutely true.

Pro-Environmental Attitudes. To capture general pro-environmental attitudes, we used the 15-item “New Environmental Paradigm Scale” (NEP; Dunlap et al., 2000; Schleyer-Lindenmann et al., 2018). Example items read, “Plants and animals have as much right as humans to exist,” “Humans are severely abusing the environment,” or “When humans interfere with nature, it often produces disastrous consequences.” Items were rated on a 6-point response scale ranging from 1 = strongly disagree to 6 = strongly agree.

Pro-Environmental Behaviour. We used the 32-item General Ecological Behaviour Scale (GEB; Kaiser, 2020) to capture pro-environmental behaviour. Example items include “I contribute financially to environmental organizations,” “I buy meat and produce with eco-labels,” or “During winter, I turn down the heating when I leave my apartment for more than 4 hours.” Items were rated on a 6-point response scale ranging from 1 = never to 6 = very often.

Pro-Environmental Policy Support. To assess participants’ support for the policy, we adapted the 10-item policy acceptance scale (PytlíkZillig et al., 2018) including the items “The demands of the campaign are reasonable” and “I would support the policy being implemented in my city.” Items were rated on a response scale ranging from 1 = strongly disagree to 6 = strongly agree.

Political Orientation. We used a single item to assess political orientation (Heywood, 2015) in order to control for political attitudes in our analyses. The prompt read as follows: “Regarding your political orientation, where would you place yourself on the following continuum?”. The item was rated on a 5-point response scale ranging from 1 = left to 5 = right.

Results and Discussion

We report zero-order correlations between study variables in Table 2. The experimental conditions did not differ significantly with regard to political orientation, pro-environmental attitudes, or past pro-environmental behaviour. We collapsed the economic and ecological condition into a control condition, “no self-relevance”¹⁶. The social justice condition represented the experimental condition, “self-relevance.” In order to test whether VS predicts pro-environmental policy support when climate change consequences are framed in self-relevant terms (vs. non-self-relevant terms) we conducted multiple linear regressions (Table 3). We included a dummy variable (no self-relevance = 0, self-relevance = 1) to test the hypothesized VS x self-relevance interaction effect. VS was standardized to facilitate the interpretation of the regression weights. The other-oriented JS facets (also standardized) were included as covariates. VS was negatively related to policy support in the no self-relevance condition, $\beta = -.25$ ($SE = .14$), $t(380) = -3.28$, $p < .001$, 95% CI [-0.40, -0.10]. In other words, the more victim-sensitive participants are, the less they are willing to support the pro-environmental policy when the consequences of climate change are framed in non-self-relevant terms (i.e., ecological, economic). Contrary to our prediction, the hypothesized interaction effect (VS x self-relevance) was non-significant, $\beta = .22$ ($SE = .14$), $t(379) = 1.53$, $p = .13$, 95% CI [-0.02, 0.17], $\Delta R^2 = .005$. Thus, framing climate change consequences in self-relevant terms (vs. non-self-relevant terms) did not motivate victim-sensitive individuals to support a pro-environmental policy aimed at mitigating climate change consequences.

¹⁶ This research project included hypotheses, irrelevant to the current study, which specifically focused on the effect of topic-related climate change framings on policy support. For the purposes of the current manuscript, which focused on the comparison between “non-self-relevant” framing and “self-relevant” framing, we collapsed the two conditions, economic and ecological into on baseline condition: no self-relevance. The two conditions did not differ significantly with regard to the relevant DV (i.e., policy support), $t(252.93) = -0.56$, $p = .29$.

Taken together, in Study 1, we did not find evidence for our “active protection pathway” hypothesis. This may either suggest that this hypothesis is wrong, or it may suggest that we were unable to find evidence for it given the following drawbacks in the design of Study 1: First, climate change was framed using different topics (i.e., social justice, economy, environment), which could have influenced participants’ inclination to support the environmental policy. Second, victim-sensitive individuals tend to suspect that policy makers harbour ulterior motives (Agroskin et al., 2015), which might have distorted the results. Third, the “self-relevant” condition focused on the group and not on the individual. However, victim-sensitive individuals may be more likely to engage in collective action when they perceive (a) either *personal* disadvantage (Traut-Mattausch et al., 2011) or (b) group-based disadvantage—but only if they highly identify with this group (Baumert et al., 2022). Fourth, the study did not include a manipulation check to assess whether participants in the “self-relevance” condition indeed perceived climate change consequences as more self-relevant than participants in the “non-self-relevant” condition. We address these shortcomings in Study 2.

STUDY 2

Study 2 was designed to address the aforementioned shortcomings and test the “active protection pathway” hypothesis more rigidly (the effect of VS on participants’ pro-environmental engagement is positive when these consequences are self-relevant). To do so, the design of Study 2 differs from the design of Study 1 in several aspects: First, we used a new context, in which an expert instead of a (political) initiative introduced the topic of unjust climate consequences; in addition, we kept the content-related focus of the climate change consequences constant across conditions. Second, we included a condition in which the climate change consequences were framed as relevant for the individual and another condition in which the consequences were framed as group relevant. In addition, we captured group identification to account for the assumption that VS predicts collective action when group

identification is high (Baumert et al., 2022). Third, we included a manipulation check to assess whether participants in the self- and group-relevant conditions actually perceived the climate change consequences as more self-relevant than participants in the non-self-relevant condition. Furthermore, we extended the dependent variable “pro-environmental engagement.” Next to supporting a political initiative (akin to Study 1), we included protest behaviour and signing a petition to combat the climate change consequences as behavioural consequences. Finally, we included control variables that have been shown to reliably predict pro-environmental engagement, including political orientation, social dominance orientation, right-wing authoritarianism, belief in climate change, knowledge on climate change, perceived efficacy, and trust in the information source (e.g., Almassi, 2012; Doherty & Webler, 2016; Stanley & Wilson, 2019; Wong-Parodi & Berlin Rubin, 2022).

Methods

Sample

We hypothesized that (1) a personal-relevance (vs. no self-relevance) framing of climate change consequences should increase the effect of VS on pro-environmental engagement, (2) a group-relevance (vs. no self-relevance) framing of climate change consequences should increase the effect of VS on pro-environmental engagement, and (3) in-group identification should amplify the effect specified in Hypothesis 2. The latter hypothesis implies a three-way interaction effect (victim sensitivity x group identification x group-relevance vs. no self-relevance framing).

To determine the necessary sample size to detect this interaction effect, we again built upon previous research that found small to moderate effect sizes for a VS x framing interaction (Rothmund et al., 2017). Given that higher-order interactions are usually smaller than lower-order interactions, we assumed the population effect size to be small ($\Delta R^2 = .03$). Assuming an alpha of .05 and a power of .90, $N = 617$ participants are necessary to detect such an effect. We recruited 669 participants to account for dropouts and exclusions. Our final

sample size includes 617 participants. We recruited participants via university mailing lists, the authors' personal network, and online sampling portals. Participation requirements were a minimum age of 18 years and a good proficiency of the German language. In the final sample, 61% identified as female, 38% as male, and 1% as non-binary including an age range from 18 to 85 years ($M = 35.71$, $SD = 16.27$). Among all participants, 44.3% were employed, 13.3% were unemployed and 40.4% were students.

Procedure

At the start of the study, all participants read a vignette, in which participants were asked to imagine that they attended an information event on the “multi-dimensional consequences of climate change” (see SOM, “Study 2”). The introductory text elaborated that politicians, economists, as well as climate change experts were invited to give talks at the event. Participants were asked to imagine that they attended a talk by an expert on climate change consequences. We presented the following excerpt of the expert's address to all participants: “Current evidence suggests that society's approach to climate change will lead to unjust consequences. Disadvantages will occur in different areas of life. This concerns, for example, our living space, health, mobility, working life, and access to important resources.” Participants were then randomly assigned to one of three experimental conditions. In the *control* condition (no self-relevance) ($n = 199$), the text did not continue. In the *individual relevance* condition ($n = 205$), the expert's address ended with the following statement: “You will *personally* feel these consequences.” In the *group relevance* condition ($n = 213$), the expert's address ended with the following statement: “*Germans* will feel these consequences” (note: we conducted the study in Germany). After reading the vignette, participants were asked to complete a comprehension check and to answer a battery of questions capturing constructs relevant for our hypotheses, control variables, and demographics (see below).

Materials

Descriptive statistics and reliability estimates are reported in Table 4 (for a complete overview of the study material, see SOM, “Study 2”). We had additionally intended to assess non-normative pro-environmental engagement. We decided to omit this variable due to low internal consistency ($\alpha = .33$). If not stated otherwise, all items were rated on 6-point response scales ranging from 1 = not at all true to 6 = absolutely true.

Justice Sensitivity. Victim, observer, beneficiary, and perpetrator sensitivity were measured using 10 items per facet (Justice Sensitivity Inventory; Schmitt et al., 2010). Example items can be found in the Materials section for Study 1.

Group Identification. We adapted the 14-item in-group identification scale (Leach et al., 2008). Example items read, “I feel a bond with Germans,” “I am glad to be German,” and “I often think about the fact that I am German.”

Right-Wing Authoritarianism. We used the 9-item KSA-3 scale by Beierlein et al. (2014). Example items are “We should take strong action against misfits and slackers in society,” “People should leave important decisions in society to their leaders,” and “Traditions should definitely be carried on and kept alive.” Items were rated on a 6-point response scale ranging from 1 = strongly disagree to 6 = strongly agree.

Social Dominance Orientation. We used the 3-item short SDO scale (Six et al., 2001), consisting of the following items: “An ideal society requires some groups to be on top and others to be on the bottom,” “Group equality should be our primary goal” (reverse coded), and “It is unjust to try to make all social groups equal.”

Political Orientation. We used a single item to assess political orientation (Süssenbach & Gollwitzer, 2015). The prompt read as follows: “In politics people often talk about the ‘left’ and the ‘right’. Where would you place yourself on the following continuum?” The item was rated on a 7-point response scale ranging from 1 = left to 7 = right.

Belief in Climate Change. Participants' belief in climate change was assessed using three items (European Social Survey, 2018). The items read: "In my opinion, the climate is changing" (Response options: "Definitely no," "Maybe," "Definitely yes"); "In my opinion, the causes of climate change are:" (Response options: "Primarily natural processes," "Combination of natural and human-caused causes," "Primarily human-caused"), and "In my opinion, the consequences of climate change for people worldwide are:" (Response options: "Positive," "Ambiguous," "Negative").

Self-efficacy. We used a single self-generated item to assess self-efficacy: "I can do something about the unjust consequences of climate change."

Self-Reported Knowledge about Climate Change. We used a single self-generated item to capture self-reported knowledge about climate change: "I am well-informed on the topic of 'climate change'."

Trust in Source. We used a single self-generated item to capture trust in the information source: "I perceived the expert as trustworthy."

Pro-Environmental Engagement. We assessed pro-environmental engagement by adapting a 3-item political engagement measure (Rothmund et al., 2014). Participants were asked whether (and to what extent) they would (a) sign a petition (a) participate in a lawful protest and (c) participate in a local initiative to combat the consequences of climate change. Items were rated on a 3-point response scale with the response options 1 = never, 2 = once in a while, and 3 = regularly.

Results and Discussion

We report zero-order correlations between study variables in Table 5. First, we tested whether participants' perception that climate change consequences affected them personally would differ between experimental conditions. On average, participants in the *individual* ($M = 4.96$, $SD = 1.09$) and *group* relevance condition ($M = 4.89$, $SD = 1.21$) agreed more strongly that climate change consequences would affect them personally than participants in the

control condition ($M = 4.34$, $SD = 1.33$), $F(2, 614) = 15.84$, $p < .001$, $\eta^2 = .05$. Post-hoc comparisons using the Tukey HSD test indicated that mean scores of perceived self-relevance were significantly higher in the individual ($p < .01$) and group relevance condition ($p < .01$) compared to the control condition. The mean difference between the individual and group relevance conditions was not significant ($p = .83$).

To test whether VS predicts pro-environmental policy support when climate change consequences are framed in self-relevant terms (vs. non-self-relevant terms) we conducted a multiple linear regression, which included two dummy-coded variables; Dummy 1: control condition = 0, individual relevance = 1, group relevance = 0; Dummy 2: control condition = 0, individual relevance = 0, group relevance = 1), VS (standardized), interaction terms (VS x Dummy 1; VS x Dummy 2) as well as the other-oriented JS facets (standardized) as covariates (see Table 6). VS was again negatively related to pro-environmental engagement in the control condition (i.e., non-self-relevant consequences of climate change), $\beta = -.15$ ($SE = .04$), $t(565) = -3.36$, $p < .01$, 95% CI [-0.23, -0.06]. This effect persisted when including covariates. Contrary to Hypothesis 1, the focal interaction term (VS x Dummy 1) was non-significant, $\beta = -.13$ ($SE = .10$), $t(563) = -1.40$, $p = .16$, 95% CI [-0.32, 0.05], $\Delta R^2 = .003$. Thus, framing climate change consequences in individually relevant terms (vs. non-self-relevant terms) did not motivate victim-sensitive individuals to show pro-environmental engagement. Also, the VS x Dummy 2 interaction specified in Hypothesis 2 was non-significant, $\beta = -.03$ ($SE = .09$), $t(563) = -0.27$, $p = .80$, 95% CI [-0.21, 0.16], $\Delta R^2 = .000$. In other words, framing climate change consequences in group-relevant terms (vs. non-self-relevant terms) did also not motivate victim-sensitive individuals to show pro-environmental engagement.

Finally, we tested whether in-group identification amplifies the interaction effect of group-relevance vs. no relevance framing x VS (Hypothesis 3). We conducted multiple linear regressions to test this hypothesis (Table 7). We included both Dummy variables as well as

VS and group identification (both standardized) and all relevant interaction terms. The other-oriented JS facets (standardized) were again included as covariates. Contrary to our prediction, the focal interaction term (VS x Dummy 2 x group identification) was non-significant, $\beta = -.02$ ($SE = .08$), $t(559) = -0.29$, $p = .77$, 95% CI [-0.18, 0.13], $\Delta R^2 = .000$.

Thus, in-group identification did not make high-VS participants more willing to support pro-environmental policies if climate change consequences are framed in group-relevant terms.

Taken together, the results of Study 1 and 2 do not support the active protection pathway.

Our failed attempts to find support for our hypothesis can have methodological and theoretical reasons. Methodologically, the stimuli might not have been strong enough to elicit a feeling of victimization among high-VS individuals. Theoretically, the studies suggest that their underlying fear of exploitation, which comes along with a suspicious mindset and self-protective tendencies (“passive protection”) trumped the “active protection pathway.” The finding that VS negatively predicted pro-environmental engagement in Studies 1 and 2 supports this idea.

STUDY 3

In Study 3, we examined the “passive protection pathway,” predicting that VS is negatively related to pro-environmental engagement when a fear of exploitation is elicited (and not invalidated), but that this effect is diminished (or even reversed) when the fear of exploitation has been removed. In order to remove participants’ fear of being exploited, we use a paradigm that had been used in previous research (Gollwitzer et al., 2009). In this study, participants played an online version of a (step-level) public goods game with three other participants. Before doing so, they saw four “sample rounds” of the game (ostensibly in order to make them familiar with the structure of the game). In these sample rounds, participants either witnessed no instance of free-riding among other players (i.e., all players always cooperated in their games), some instances of free-riding (i.e., 3 players behave egoistically), or many instances of free-riding (i.e., 6 players behave egoistically). While VS was negatively

related to cooperation in the “some free-riding” and the “many free-riding” conditions, this effect was diminished in the “no free-riding” condition. In other words, suggesting that the descriptive norm is to cooperate diminished the effect of VS on participants’ own willingness to cooperate.

We adapted this descriptive norm manipulation for the present study. Specifically, we informed participants about a campaign aimed at mitigating climate change consequences, and we manipulated fear of exploitation by providing information that either indicated that only few citizens (low descriptive norm) or many citizens (high descriptive norm) have shown cooperative intentions in the context of similar campaigns in the past. We expected a negative effect of VS on policy support in the “low descriptive norm” condition, but not in the “high descriptive norm” condition. We again extended the dependent variable “pro-environmental engagement,” now including both general policy support and adherence to measures proposed by the policy on the one hand (henceforth referred to as “policy support”), and protest behaviour on the other hand.

Methods

Sample

Based on prior research examining the interaction effect between VS and the fear of exploitation (Süssenbach & Gollwitzer, 2015; Study 2), we assumed a medium-size population effect ($\Delta R^2 = .06$). Assuming an alpha of .05 and a power of .90, $N = 241$ are necessary to detect such an effect. We recruited 303 participants to account for dropouts and exclusions. Our final sample includes 278 participants. As in the previous studies, we recruited participants via university mailing lists, the authors’ personal network, and online sampling portals. Participation requirements were a minimum age of 18 years and a good proficiency of the German language. In the final sample, 62% identified as female, 37% as male, and 1% as diverse. Age ranged from 18 to 82 years ($M = 40.10$, $SD = 16.27$). Among all

participants who responded to this question, 51.6% said they were employed, 17.7% were unemployed, and 30.3% were students.

Procedure

Participants were informed that they would read two short texts and answer a set of questions regarding climate change (for a detailed overview of the study material, see SOM, “Study 3”). The first text introduced a political campaign that aimed at saving water in private households. Participants were then randomly assigned to one of two experimental conditions: In the *low descriptive norm* condition ($n = 138$), participants read the following text:

“‘Save water for our climate!’ – With this slogan, your city is currently promoting a campaign to reduce monthly water consumption in private households by one third. An analysis of a past campaign in the area of energy consumption showed that 32 percent of citizens in your city contributed to reducing energy consumption. On the following page, you can read an excerpt from a press release on the current campaign.”

In the *high descriptive norm* condition ($n = 140$), participants read a similar text; however, in this condition, participants read that 93 percent¹⁷ of citizens in their city contributed to reducing energy consumption.

On the next page, all participants read the following text—ostensibly a press release about the current campaign:

“In order to reduce water consumption in private households by one third, citizens must adapt their habits with immediate effect. The use of dishwashers and washing machines must be significantly reduced, gardens may only be watered with rainwater, water-saving showerheads must be installed, citizens should not take baths and showers may be taken for a maximum of 5 minutes.”

¹⁷ Percentages reflecting “high” and “low” descriptive norms adapted from Schultz, Khazian, & Zaleski, 2008.

After reading the texts, participants were asked to complete a comprehension check and to answer a battery of questions capturing constructs relevant for our hypotheses, control variables, and demographics (see below).

Materials

Justice sensitivity as well as control variables¹⁸ were measured in an identical fashion as in Study 2 (for a complete overview of the study material, see SOM, “Study 3”). If not stated otherwise, all items were rated on 6-point response scales ranging from 1 = strongly disagree to 6 = strongly agree. Descriptive statistics and reliability estimates are reported in Table 8.

Perceived exploitation. We developed three items to capture perceived exploitation: “I believe that most citizens in my city would exploit the fact that other citizens take action to conserve water;” “I believe that most citizens in my city would not conserve water because of laziness;” and “I believe that most citizens in my city would adjust their habits to save water” (reverse coded).

Self-efficacy. We adapted two items from previous research to capture self-efficacy (Hoppe et al., 2023): “I can personally contribute to saving one third of the monthly water consumption of private households in my city” and “I believe that I can personally contribute to saving one third of the monthly water consumption of private households in my city.”

Group-efficacy. We adapted two items to capture group-efficacy from previous research (Hoppe et al., 2023): “We, the citizens of my city, are able to save one third of the monthly water consumption of private households in our city.” and “I believe that we, the citizens of my city, together are able to save one third of the monthly water consumption of private households in our city.”

¹⁸ Self-efficacy was measured using a new measure to control for both self- and group-efficacy (cf. Hoppe et al., 2023)

Pro-Environmental Policy Support. We generated four items to capture pro-environmental policy support (e.g., “I would implement all measures suggested in the press release in order to save water;” “I would drastically adjust my habits to save water starting immediately”).

Pro-Environmental Protest Behaviour. We assessed protest behaviour by adapting a 3-item political engagement measure (Rothmund et al., 2014): “I would sign a petition to support the campaign,” “I would participate in a lawful protest to support the campaign,” and “I would participate in a citizens’ action group to support the campaign”.

Results and Discussion

We report zero-order correlations between study variables in Table 9. To test our hypotheses that (1) victim sensitivity negatively predicts pro-environmental engagement in the low descriptive norm condition and (2) this effect is diminished (or even reversed) in the high descriptive norm condition, we specified two moderated regression models predicting pro-environmental policy support and protest (see Table 10). We entered a dummy variable (low descriptive norm condition = 0, high descriptive norm condition = 1), VS (standardized), and the Dummy x VS interaction effect into the model. The other-oriented JS facets (standardized) were included as covariates. As expected, the results showed a negative conditional effect of VS on pro-environmental policy support, $\beta = -.25$ ($SE = .07$), $t(271) = -3.80$, $p < .01$, 95% CI [-0.38, -0.12], and protest behaviour, $\beta = -.29$ ($SE = .07$), $t(271) = -4.49$, $p < .01$, 95% CI [-0.42, -0.17] in the low descriptive norm condition. Contrary to our prediction, the hypothesized interaction effect (Dummy x VS) on pro-environmental policy support did not reach statistical significance, $\beta = -.22$ ($SE = .11$), $t(270) = -1.97$, $p = .05$, 95% CI [-0.45, 0.00], $\Delta R^2 = .012$, and the same interaction effect on pro-environmental protest was non-significant, $\beta = -.15$ ($SE = .11$), $t(270) = -1.36$, $p = .18$, 95% CI [-0.37, 0.07], $\Delta R^2 = .006$.

Follow-up tests showed that, in the high descriptive norm condition, VS still negatively predicted both pro-environmental protest behaviour and policy support: In models

without covariates, the effects of VS in this conditions were $\beta = -.45$ ($SE = .14$), $t(135) = -3.33$, $p < .01$ on pro-environmental protest behaviour and $\beta = -.43$ ($SE = .11$), $t(135) = -3.74$, $p < .01$ on policy support. With covariates included, the effects on protest behaviour, $\beta = -.33$ ($SE = .14$), $t(118) = -2.36$, $p = .02$ and policy support, $\beta = -.27$ ($SE = .10$), $t(118) = -2.71$, $p < .01$ persisted. In other words, the perception of a “high descriptive norm” did not motivate victim-sensitive individuals to show pro-environmental engagement.

In order to examine whether the failure to motivate individuals high in VS to show pro-environmental engagement could be due to a failure to invalidate victim-sensitives’ fear of exploitation by providing information on others’ cooperative intentions (i.e., high descriptive norm), we conducted a moderated regression analysis predicting fear of exploitation. In this regression model, we entered a dummy variable (low descriptive norm condition = 0, high descriptive norm condition = 1), VS (standardized), the Dummy x VS interaction, as well as the other JS facets as covariates. As expected, the results showed a positive conditional effect of VS on fear of exploitation in the low descriptive norm condition, $\beta = .27$ ($SE = .07$), $t(271) = 3.93$, $p < .01$. Contrary to our prediction, the interaction effect (Dummy x VS) on fear of exploitation was non-significant, $\beta = -.16$ ($SE = .12$), $t(270) = -1.30$, $p = .20$, $\Delta R^2 = .006$. In other words, our attempt to invalidate victim sensitives’ fear of exploitation using a “high descriptive norm” manipulation was unsuccessful.

We identify four explanations for this finding, all of which support the notion of the “passive protection pathway.” The first explanation refers to the tendency of victim-sensitive people to attribute ulterior motives to policy makers, which has shown to be associated with the rejection of political reforms (Agroskin et al., 2015). In the case of our manipulation, an initiative was promoted by providing people with information on the percentage of citizens who participated in a similar initiative (92%). Individuals high in VS might have perceived this percentage as unrealistically high and thus as a dishonest ruse to gain support for the initiative. The second explanation pertains to the finding that consensus communications

about climate change and its consequences can elicit reactance (including decreased support for mitigation policies) due to the perception that one's freedom is thwarted (Chinn & Hart, 2023). Past research showed that VS-high individuals are prone to engage in reactance behaviour (Traut-Mattausch et al., 2011) and the current findings further corroborate this. The third explanation pertains to the notion that people generally tend to perceive non-normative behaviour by minority groups as more malicious than non-normative behaviour by majority groups (King & Wheelock, 2007). It might be that especially people high in VS perceived the behaviour by the non-cooperative minority as more malicious than the non-cooperative behaviour of the majority, which in turn elicited "passive protection" behaviour even in the high descriptive norm condition. The fourth explanation relates to the finding that high-VS individuals tend to avoid investing in the public interest (Rothmund et al., 2014). The combination that (a) the manipulation did not make the self-relevance of the negative consequences of not saving water explicit (a circumstance under which high-VS individuals seem to disengage, as Studies 1 and 2 show) and (b) a large cooperative majority is likely to secure the "public interest" (saving water), high-VS individuals might not have felt the need to contribute to the public interest themselves.

General Discussion

The current research project examined how interindividual differences in justice perceptions can affect people's tendency to engage in pro-environmental action. While past research on collective environmental action mainly focused on motivational or attitudinal antecedents, such as identity concerns, moral convictions, and self- or group-efficacy beliefs (e.g., Fritsche & Masson, 2021; Furlong & Vignoles, 2021; Jugert et al., 2016; Wallis & Loy, 2021), the present project investigated how justice-related personality differences can affect environmental action and policy support. Specifically, research on justice sensitivity has shown that a dispositional sensitivity to being disadvantaged (i.e., victim sensitivity) can promote or impede collective action (Rothmund et al., 2014; Traut-Mattausch et al., 2011).

Based on theoretical considerations and first empirical findings, we identified two “pathways of self-protection,” representing psychological processes inherent to victim sensitivity, which can either foster or hinder pro-environmental engagement.

The first two studies examined the “active protection pathway,” which postulates that individuals high in VS should be more likely to support or even engage in pro-environmental action when they perceive that they might be directly disadvantaged by climate change consequences. Taken together, the results from Studies 1 and 2 do not provide support for this hypothesis. Both studies showed that framing climate change consequences in self-relevant terms did not motivate high-VS participants to show pro-environmental policy support or engage in pro-environmental protest. On the one hand, this may be due to methodological reasons. We attempted to manipulate perceived victimization by framing climate change consequences in self-relevant terms (vs. non-self-relevant terms). It is possible that this manipulation was too abstract. Past research showed that victim-sensitive individuals showed political engagement when they were asked to reflect about how a political reform will have negative consequences for them personally (Traut-Mattausch et al., 2011). Thus, future research could examine whether high-VS individuals engage in climate action when they are prompted to reflect explicitly about how exactly climate change will lead to negative personal consequences. Given that the negative consequences of climate change are unequally distributed across the world, with the “global south” suffering much more than the “global north” (e.g., Eriksen et al., 2021), from which our participants came, it is likely that even though participants regarded climate change consequences as self-relevant, they perceived themselves in an advantaged position relative to other groups. In an advantaged position, people high in VS tend to show less solidarity and less motivation to redress injustices inflicted upon others (Baumert et al., 2022).

Another theoretical explanation for the finding that perceived self-relevance did not motivate victim-sensitive individuals to show pro-environmental engagement is the “passive

protection pathway.” In Studies 1 and 2, we found a negative relationship between VS and pro-environmental engagement when climate change consequences were framed in non-self-relevant terms. As previously noted, political engagement scenarios can be viewed as social dilemma situations, in which in-group members can exploit one’s efforts (e.g., Heckathorn, 1996). Based on abundant evidence showing that VS is related to mistrust and antisocial behaviour in social dilemmas (e.g., Gollwitzer et al., 2009; Rothmund et al., 2011; Tham et al., 2019), it is plausible that this “passive protective” tendency outweighed the “active protection pathway.”

Study 3 examined the “passive protection pathway” more closely. According to our theoretical reasoning, victim-sensitive individuals should be less likely to engage in pro-environmental action when there is reason to believe that they are being exploited (e.g., by “social loafers” who do not engage in collective environmental protection). Crucially, this effect should be diminished (or even reversed) when the fear of exploitation has been alleviated (e.g., Gollwitzer et al., 2009). Akin to the first two studies, VS negatively predicted pro-environmental engagement in the baseline condition over and above political orientation and ideology, attitudes towards climate change, self-efficacy beliefs, and demographic variables. However, our attempt to remove high-VS participants’ fear of being exploited by suggesting a high base-rate of cooperation (i.e., a high descriptive norm) was unsuccessful. This finding – together with the results of the first two studies – suggest that VS is a robust psychological hindrance for collective pro-environmental engagement. The failure to alleviate any fear of exploitation among victim-sensitive individuals and subsequently the antisocial tendency indicates that the psychological process underlying VS is not easily altered.

The Sensitivity to Mean Intentions model (Gollwitzer et al., 2013) offers various explanations as to why it might be difficult to manipulate victim sensitives’ fear of exploitation and their antisocial tendencies in the context of collective action. First, people high in VS weigh untrustworthiness cues more strongly than trustworthiness cues. Thus,

victim-sensitive individuals might prioritize information alluding possible exploitation (e.g., “low descriptive norms”) in the context of political engagement more strongly than information signaling collective cooperation (e.g., “high descriptive norms”). In addition, it was found that even slight untrustworthiness cues elicit a suspicious mindset among victim-sensitive people. This cognitive scheme includes a tendency to insinuate hostile intentions, an inclination to behave antisocially and uncooperatively as well as a propensity to legitimize those behavioural tendencies (Gollwitzer et al., 2013). Victim sensitives’ suspicious mindset could impede attempts to manipulate the psychological process because people high in VS might perceive others’ cooperative behaviour as dishonest. Diminishing victim sensitives’ antisocial behaviour in the context of climate action might also be difficult because people high in VS have shown to refrain from pro-environmental behaviour as they morally disengage, which is in line with the assumptions of the suspicious mindset hypothesis (Gollwitzer et al., 2013; Nicolai et al., 2022). Thus, victim-sensitive individuals might disengage from pro-environmental engagement because they maintain legitimization strategies, such as decreasing (moral) responsibility.

The current empirical insights and theoretical considerations offer various avenues for future research. In order to examine the “active protection pathway,” studies should examine the effects of VS on collective engagement among individuals in disadvantaged groups. In the climate action context, it would be possible to conduct research projects similar to Studies 1 and 2 to investigate whether VS predicts collective action intentions among disadvantaged. In addition, studies investigating the “passive protection pathway” should experimentally test possibilities of diminishing the fear of exploitation among victim-sensitive individuals. For instance, rather than invalidating the fear of exploitation by using descriptive norms, studies could provide participants with information of the cooperative intentions of fellow citizens. Based on the Sensitivity to Mean Intentions model, which assumes that victim-sensitive individuals are particularly vigilant towards mean intentions (i.e., exploitation), manipulations

that focus specifically on other people's intentions are relevant to illuminate the psychological process. Lastly, even though past research has shown that there is no considerable difference between hypothetical studies and real-life studies regarding effects of VS (e.g., Bondü & Krahe, 2015; Fetchenhauer & Huang, 2004) future research should investigate whether the current findings regarding the "active" and "passive self-protection pathways" can be replicated in real-life scenarios of collective action.

Regarding practical implications, we believe that the research presented here offers some new insights. While most intervention research in the area of environmental psychology and behaviour has focused on situational factors (e.g., Byerly et al., 2018; de Groot & Schuitema, 2012; Nyborg, 2018), the current findings suggest that interindividual differences – people's personality – predicts their inclination to engage in or refrain from pro-environmental action. Practitioners can benefit from the current insights as the present findings suggest that commonly known and widely applied pro-environmental interventions focusing on making the issue (i.e., climate change) personally relevant (e.g., Whitmarsh & O'Neill, 2010) or emphasizing the engagement of fellow citizens (e.g., Farrow et al., 2017) might not work for people high in victim sensitivity. The present insights on the effect of VS on pro-environmental engagement suggest that interventions should target people's fear of being the "sucker" who engages in collective action while others sit back whilst unilaterally profiting from the group's engagement for our climate. To this end, practitioners could develop freely accessible platforms that provide information on fellow citizen's cooperative intentions in the context of pro-environmental behaviour as well as training programs, in which people learn to cooperate and trust team members to achieve a common goal.

Conclusion

Climate change is a global crisis that affects people in various ways. Therefore, we need insights from different (sub-) disciplines in order to understand why people are inclined to engage in or refrain from pro-environmental action. While research on collective action has

shown that perceived injustice represents a key indicator of collective pro-environmental action (e.g., Furlong & Vignoles, 2021), the current research project suggests that we need to consider individual differences when examining the relationship between perceived injustice and climate action. The present findings indicate that a dispositional tendency to perceive oneself as a victim of injustice represents a robust obstacle for pro-environmental engagement. With the current theoretical and empirical insights regarding the pathways of “active” and the “passive self-protection,” we provide an important foundation to further our understanding of victim sensitivity and its consequences for pro-environmental action.

References

- Agostini, M., & van Zomeren, M. (2021). Toward a comprehensive and potentially cross-cultural model of why people engage in collective action: A quantitative research synthesis of four motivations and structural constraints. *Psychological Bulletin*, *147*(7), 667–700. <https://doi.org/10.1037/bul0000256>
- Agroskin, D., Jonas, E., & Traut-Mattausch, E. (2015). When suspicious minds go political: Distrusting and justifying the system at the same time. *Political Psychology*, *36*(6), 613–629. <https://doi.org/10.1111/pops.12185>
- Almassi, B. (2012). Climate change, epistemic trust, and expert trustworthiness. *Ethics and the Environment*, *17*(2), 29–49. <https://doi.org/10.2979/ethicsenviro.17.2.29>
- Baumert, A., Adra, A., & Li, M. (2022). Justice sensitivity in intergroup contexts: A theoretical framework. *Social Justice Research*, *35*(1), 7–32. <https://doi.org/10.1007/s11211-021-00378-9>
- Baumert, A., Beierlein, C., Schmitt, M., Kemper, C. J., Kovaleva, A., Liebig, S., & Rammstedt, B. (2014). Measuring four perspectives of justice sensitivity with two items each. *Journal of Personality Assessment*, *96*(3), 380–390. <https://doi.org/10.1080/00223891.2013.836526>
- Baumert, A., & Schmitt, M. (2016). Justice sensitivity. In C. Sabbagh & M. Schmitt (Eds.), *Handbook of Social Justice Theory and Research* (pp. 161–180). Springer. https://doi.org/10.1007/978-1-4939-3216-0_9
- Beierlein, C., Asbrock, F., Kauff, M., & Schmidt, P. (2014). Die Kurzskala Autoritarismus (KSA-3). *Ein ökonomisches Messinstrument zur Erfassung dreier Subdimensionen autoritärer Einstellungen*. *GESIS–Leibniz-Institut für Sozialwissenschaften*. Mannheim

- Bondü, R., & Krahé, B. (2015). Links of justice and rejection sensitivity with aggression in childhood and adolescence. *Aggressive Behavior, 41*(4), 353–368.
<https://doi.org/10.1002/ab.21556>
- Byerly, H., Balmford, A., Ferraro, P. J., Hammond Wagner, C., Palchak, E., Polasky, S., Ricketts, T. H., Schwartz, A. J., & Fisher, B. (2018). Nudging pro-environmental behavior: Evidence and opportunities. *Frontiers in Ecology and the Environment, 16*(3), 159–168. <https://doi.org/10.1002/fee.1777>
- Chinn, S., & Hart, P. S. (2023). Climate change consensus messages cause reactance. *Environmental Communication, 17*(1), 51–59.
<https://doi.org/10.1080/17524032.2021.1910530>
- Cook, T. D., Crosby, F., & Hennigan, K. M. (1977). The construct validity of relative deprivation. In R. L. Miller & J. M. Suls (Eds.), *Comparison Processes: Theoretical and Empirical Perspectives* (pp. 307–333)
- Doherty, K. L., & Webler, T. N. (2016). Social norms and efficacy beliefs drive the alarmed segment's public-sphere climate actions. *Nature Climate Change, 6*(9), Article 9.
<https://doi.org/10.1038/nclimate3025>
- de Groot, J. I. M., & Schuitema, G. (2012). How to make the unpopular popular? Policy characteristics, social norms and the acceptability of environmental policies. *Environmental Science & Policy, 19–20*, 100–107.
<https://doi.org/10.1016/j.envsci.2012.03.004>
- Dunlap, R. E., Van Liere, K. D., Mertig, A. G., & Jones, R. E. (2000). New trends in measuring environmental attitudes: Measuring endorsement of the new ecological paradigm: A revised NEP scale. *Journal of Social Issues, 56*(3), 425–442.
<https://doi.org/10.1111/0022-4537.00176>

- Eriksen, S., Schipper, E. L. F., Scoville-Simonds, M., Vincent, K., Adam, H. N., Brooks, N., Harding, B., Khatri, D., Lenaerts, L., Liverman, D., Mills-Novoa, M., Mosberg, M., Movik, S., Muok, B., Nightingale, A., Ojha, H., Sygna, L., Taylor, M., Vogel, C., & West, J. J. (2021). Adaptation interventions and their effect on vulnerability in developing countries: Help, hindrance or irrelevance? *World Development*, *141*, 105383. <https://doi.org/10.1016/j.worlddev.2020.105383>
- European Social Survey. (2018). In *www.europeansocialsurvey.org*. European Social Survey ERIC. Retrieved from https://www.europeansocialsurvey.org/docs/findings/TL9_Climate-Change-Swiss-German.pdf
- Farrow, K., Grolleau, G., & Ibanez, L. (2017). Social norms and pro-environmental behavior: A review of the evidence. *Ecological Economics*, *140*, 1–13. <https://doi.org/10.1016/j.ecolecon.2017.04.017>
- Faul, F., Erdfelder, E., Lang, A.-G., & Buchner, A. (2007). G*Power 3: A flexible statistical power analysis program for the social, behavioral, and biomedical sciences. *Behavior Research Methods*, *39*(2), 175–191. <https://doi.org/10.3758/BF03193146>
- Fetchenhauer, D., & Huang, X. (2004). Justice sensitivity and distributive decisions in experimental games. *Personality and Individual Differences*, *36*(5), 1015–1029. [https://doi.org/10.1016/S0191-8869\(03\)00197-1](https://doi.org/10.1016/S0191-8869(03)00197-1)
- Fritsche, I., & Masson, T. (2021). Collective climate action: When do people turn into collective environmental agents? *Current Opinion in Psychology*, *42*, 114–119. <https://doi.org/10.1016/j.copsyc.2021.05.001>
- Furlong, C., & Vignoles, V. L. (2021). Social identification in collective climate activism: Predicting participation in the environmental movement, extinction rebellion. *Identity*, *21*(1), 20–35. <https://doi.org/10.1080/15283488.2020.1856664>

- Gollwitzer, M., Magraw-Mickelson, Z., Vollan, B., & Süssenbach, P. (2021). Victim sensitivity in groups: When is one a detriment to all? *Journal of Theoretical Social Psychology, 5*(1), 3–13. <https://doi.org/10.1002/jts5.76>
- Gollwitzer, M., & Rothmund, T. (2009). When the need to trust results in unethical behavior: The sensitivity to mean intentions (SeMI) model. In *Psychological perspectives on ethical behavior and decision making* (pp. 135–152). Information Age Publishing, Inc.
- Gollwitzer, M., & Rothmund, T. (2011). What exactly are victim-sensitive persons sensitive to? *Journal of Research in Personality, 45*(5), 448–455. <https://doi.org/10.1016/j.jrp.2011.05.003>
- Gollwitzer, M., Rothmund, T., Alt, B., & Jekel, M. (2012). Victim sensitivity and the accuracy of social judgments. *Personality and Social Psychology Bulletin, 38*(8), 975–984. <https://doi.org/10.1177/0146167212440887>
- Gollwitzer, M., Rothmund, T., Pfeiffer, A., & Ensenbach, C. (2009). Why and when justice sensitivity leads to pro- and antisocial behavior. *Journal of Research in Personality, 43*(6), 999–1005. <https://doi.org/10.1016/j.jrp.2009.07.003>
- Gollwitzer, M., Rothmund, T., & Süssenbach, P. (2013). The Sensitivity to Mean Intentions (SeMI) Model: Basic assumptions, recent findings, and potential avenues for future research. *Social and Personality Psychology Compass, 7*(7), 415–426. <https://doi.org/10.1111/spc3.12041>
- Gollwitzer, M., Schmitt, M., Schalke, R., Maes, J., & Baer, A. (2005). Asymmetrical effects of justice sensitivity perspectives on prosocial and antisocial behavior. *Social Justice Research, 18*(2), 183–201. <https://doi.org/10.1007/s11211-005-7368-1>
- Guimond, S., & Dubé-Simard, L. (1983). Relative deprivation theory and the Quebec nationalist movement: The cognition–emotion distinction and the personal–group deprivation issue. *Journal of Personality and Social Psychology, 44*(3), 526–535. <https://doi.org/10.1037/0022-3514.44.3.526>

- Heckathorn, D. D. (1996). The dynamics and dilemmas of collective action. *American Sociological Review*, *61*(2), 250–277. <https://doi.org/10.2307/2096334>
- Heywood, A. (2015). *Key Concepts in Politics and International Relations*. Bloomsbury Publishing.
- Hoppe, A., Fritsche, I., & Chokrai, P. (2023). The “I” and the “We” in nature conservation—investigating personal and collective motives to protect one’s regional and global nature. *Sustainability*, *15*(5), Article 5. <https://doi.org/10.3390/su15054694>
- IPCC. (2023). Climate Change 2023: Synthesis Report. Contribution of Working Groups I, II and III to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change [Core Writing Team, H. Lee and J. Romero (eds.)]. IPCC, Geneva, Switzerland, 184 pp., doi: 10.59327/IPCC/AR6-9789291691647.
- Irwin, K., & Simpson, B. (2013). Do descriptive norms solve social dilemmas? Conformity and contributions in collective action groups. *Social Forces*, *91*(3), 1057–1084. <https://doi.org/10.1093/sf/sos196>
- Jugert, P., Greenaway, K. H., Barth, M., Büchner, R., Eisentraut, S., & Fritsche, I. (2016). Collective efficacy increases pro-environmental intentions through increasing self-efficacy. *Journal of Environmental Psychology*, *48*, 12–23. <https://doi.org/10.1016/j.jenvp.2016.08.003>
- Kaiser, F. G. (2020). *GEB-50. General Ecological Behavior Scale*. <https://www.psycharchives.org/en/item/9fc3d2a6-28be-413b-bf3f-ecc488f84374>
- Kawakami, K., & Dion, K. L. (1993). The impact of salient self-identities on relative deprivation and action intentions. *European Journal of Social Psychology*, *23*(5), 525–540. <https://doi.org/10.1002/ejsp.2420230509>
- Keshavarzi, S., McGarty, C., & Khajehnoori, B. (2021). Testing social identity models of collective action in an Iranian environmental movement. *Journal of Community & Applied Social Psychology*, *31*(4), 452–464. <https://doi.org/10.1002/casp.2523>

- King, R. D., & Wheelock, D. (2007). Group threat and social control: Race, perceptions of minorities and the desire to punish. *Social Forces*, 85(3), 1255–1280.
<https://doi.org/10.1353/sof.2007.0045>
- Knappe, H., & Renn, O. (2022). Politicization of intergenerational justice: How youth actors translate sustainable futures. *European Journal of Futures Research*, 10(1), 6.
<https://doi.org/10.1186/s40309-022-00194-7>
- Köhler, L. J. E., & Gollwitzer, M. (2024). How victim sensitivity affects our attitudes and behaviour towards immigrants. *British Journal of Psychology*, 00, 1–31.
<https://doi.org/10.1111/bjop.12695>.
- Leach, C. W. (2002). Democracy's dilemma: Explaining racial inequality in egalitarian societies. *Sociological Forum*, 17(4), 681–696.
<https://doi.org/10.1023/A:1021033608845>
- Leach, C. W., van Zomeren, M., Zebel, S., Vliek, M. L. W., Pennekamp, S. F., Doosje, B., Ouwerkerk, J. W., & Spears, R. (2008). Group-level self-definition and self-investment: A hierarchical (multicomponent) model of in-group identification. *Journal of Personality and Social Psychology*, 95(1), 144–165. <https://doi.org/10.1037/0022-3514.95.1.144>
- Maltese, S., Baumert, A., Schmitt, M. J., & MacLeod, C. (2016). How victim sensitivity leads to uncooperative behavior via expectancies of injustice. *Frontiers in Psychology*, 6.
<https://www.frontiersin.org/articles/10.3389/fpsyg.2015.02059>
- Nguyen, Q. N., Nguyen, D. M., & V. Nguyen, L. (2021). An examination of the social identity model of collective action in the context of Vietnam. *The Open Psychology Journal*, 14(1). <https://doi.org/10.2174/1874350102114010001>

- Nicolai, S., Franikowski, P., & Stoll-Kleemann, S. (2022). Predicting pro-environmental intention and behavior based on justice sensitivity, moral disengagement, and moral emotions – Results of two quota-sampling surveys. *Frontiers in Psychology, 13*.
<https://www.frontiersin.org/articles/10.3389/fpsyg.2022.914366>
- Nyborg, K. (2018). Social norms and the environment. *Annual Review of Resource Economics, 10*(1), 405–423. <https://doi.org/10.1146/annurev-resource-100517-023232>
- Pettigrew, T. F., Christ, O., Wagner, U., Meertens, R. W., Dick, R. V., & Zick, A. (2008). Relative deprivation and intergroup prejudice. *Journal of Social Issues, 64*(2), 385–401. <https://doi.org/10.1111/j.1540-4560.2008.00567.x>
- PytlikZillig, L., Hutchens, M., Muhlberger, P., Gonzalez, F., & Tomkins, A. (2018). *Policy Acceptance* (pp. 89–116). https://doi.org/10.1007/978-3-319-78160-0_5
- Raub, W., & Snijders, C. (1997). Gains, losses, and cooperation in social dilemmas and collective action: The effects of risk preferences. *The Journal of Mathematical Sociology, 22*(3), 263–302. <https://doi.org/10.1080/0022250X.1997.9990204>
- Reese, G., & Jacob, L. (2015). Principles of environmental justice and pro-environmental action: A two-step process model of moral anger and responsibility to act. *Environmental Science & Policy, 51*, 88–94.
<https://doi.org/10.1016/j.envsci.2015.03.011>
- Rothmund, T., Baumert, A., & Zinkernagel, A. (2014). The German “Wutbürger”: How justice sensitivity accounts for individual differences in political engagement. *Social Justice Research, 27*(1), 24–44. <https://doi.org/10.1007/s11211-014-0202-x>
- Rothmund, T., Gollwitzer, M., & Klimmt, C. (2011). Of virtual victims and victimized virtues: Differential effects of experienced aggression in video games on social cooperation. *Personality and Social Psychology Bulletin, 37*(1), 107–119.
<https://doi.org/10.1177/0146167210391103>

- Rothmund, T., Stavrova, O., & Schlösser, T. (2017). Justice concerns can feed nationalistic concerns and impede solidarity in the Euro Crisis: How victim sensitivity translates into political attitudes. *Social Justice Research, 30*(1), 48–71.
<https://doi.org/10.1007/s11211-017-0280-7>
- Schleyer-Lindenmann, A., Ittner, H., Dauvier, B., & Piolat, M. (2018). Die NEP-Skala – hinter den (deutschen) Kulissen des Umweltbewusstseins. *Diagnostica, 64*(3), 156–167. <https://doi.org/10.1026/0012-1924/a000202>
- Schmitt, M., Baumert, A., Gollwitzer, M., & Maes, J. (2010). The Justice Sensitivity Inventory: Factorial validity, location in the personality facet space, demographic pattern, and normative data. *Social Justice Research, 23*(2), 211–238.
<https://doi.org/10.1007/s11211-010-0115-2>
- Schmitt, M., Gollwitzer, M., Maes, J., & Arbach, D. (2005). Justice sensitivity: Assessment and location in the personality space. *European Journal of Psychological Assessment, 21*(3), 202–211. <https://doi.org/10.1027/1015-5759.21.3.202>
- Schmitt, M. J., & Mohiyeddini, C. (1996). Sensitivity to befallen injustice and reactions to a real-life disadvantage. *Social Justice Research, 9*(3), 223–238.
<https://doi.org/10.1007/BF02197249>
- Six, B., Wolfrath, U., & Zick, A. (2001). Autoritarismus und Soziale Dominanz als generalisierte Einstellungen. *Zeitschrift für Politische Psychologie (9)*, 23-40.
- Stanley, S. K., & Wilson, M. S. (2019). Meta-analysing the association between social dominance orientation, authoritarianism, and attitudes on the environment and climate change. *Journal of Environmental Psychology, 61*, 46–56.
<https://doi.org/10.1016/j.jenvp.2018.12.002>
- Süssenbach, P., & Gollwitzer, M. (2015). Us(ed): The role of victim sensitivity in potentially exploitative intergroup relationships. *Group Processes & Intergroup Relations, 18*(2), 241–255. <https://doi.org/10.1177/1368430214556700>

- Tham, Y. J., Hashimoto, T., & Karasawa, K. (2019). The positive and negative effects of justice sensitivity and justice-related emotions in the volunteer's dilemma. *Personality and Individual Differences, 151*, 109501. <https://doi.org/10.1016/j.paid.2019.07.011>
- Thomas, E. F., Zubielevitch, E., Sibley, C. G., & Osborne, D. (2020). Testing the Social Identity Model of Collective Action longitudinally and across structurally disadvantaged and advantaged groups. *Personality and Social Psychology Bulletin, 46*(6), 823–838. <https://doi.org/10.1177/0146167219879111>
- Thomas, N., Baumert, A., & Schmitt, M. (2012). Justice Sensitivity as a risk and protective factor in social conflicts. In E. Kals & J. Maes (Eds.), *Justice and Conflicts: Theoretical and Empirical Contributions* (pp. 107–120). Springer. https://doi.org/10.1007/978-3-642-19035-3_6
- Traut-Mattausch, E., Guter, S., Zanna, M. P., Jonas, E., & Frey, D. (2011). When citizens fight back: Justice sensitivity and resistance to political reform. *Social Justice Research, 24*(1), 25–42. <https://doi.org/10.1007/s11211-011-0125-8>
- van Zomeren, M., Postmes, T., & Spears, R. (2008). Toward an integrative social identity model of collective action: A quantitative research synthesis of three socio-psychological perspectives. *Psychological Bulletin, 134*(4), 504–535. <https://doi.org/10.1037/0033-2909.134.4.504>
- van Zomeren, M., Postmes, T., & Spears, R. (2011). The return of moral motivation in predicting collective action against collective disadvantage. *International Journal of Social Psychology, 26*(2), 163–176. <https://doi.org/10.1174/021347411795448956>
- Whitmarsh, L., & O'Neill, S. (2010). Green identity, green living? The role of pro-environmental self-identity in determining consistency across diverse pro-environmental behaviours. *Journal of Environmental Psychology, 30*(3), 305–314. <https://doi.org/10.1016/j.jenvp.2010.01.003>

Wong-Parodi, G., & Berlin Rubin, N. (2022). Exploring how climate change subjective attribution, personal experience with extremes, concern, and subjective knowledge relate to pro-environmental attitudes and behavioral intentions in the United States.

Journal of Environmental Psychology, 79, 101728.

<https://doi.org/10.1016/j.jenvp.2021.101728>

Tables and Figures

Table 1

Descriptive Statistics and Reliability Measures of the Study Variables (Study 1)

Study variables	N	Min.	Max.	<i>M</i>	<i>SD</i>	α
Victim Sensitivity	386	1	6	3.32	1.37	.85
Observer Sensitivity	386	1	6	4.26	1.12	.80
Perpetrator Sensitivity	386	1	6	5.03	1.12	.84
Beneficiary Sensitivity	386	1	6	3.38	1.36	.87
Pro-Environmental Attitudes	386	2	6	4.75	0.69	.82
Pro-Environmental Behaviour	386	1	5	4.36	0.55	.80
Pro-Environmental Policy Support	386	1	6	4.29	1.41	.96
Political Orientation	385	1	5	2.50	0.86	-

Note. Response scales vary across measures. Political orientation was rated on a 5-point response scale ranging from 1 = left-wing to 5 = right-wing.

Table 2*Zero-Order Correlations of the Study Variables and Control Variables (Study 1)*

Study Variables		A	B	C	D	E	F	G	H
Victim Sensitivity	(A)	1							
Observer Sensitivity	(B)	.38**	1						
Beneficiary Sensitivity	(C)	.35**	.52**	1					
Perpetrator Sensitivity	(D)	.05	.34**	.36**	1				
Political Orientation	(E)	-.07	-.32**	-.19**	-.19**	1			
Pro-Environmental Attitudes	(F)	.04	.29**	.28**	.20**	-.36**	1		
Pro-Environmental Behaviour	(G)	-.03	.25**	.29**	.24**	-.28**	.42**	1	
Pro-Environmental Policy Support	(H)	-.01	.30**	.23**	.13*	-.23**	.44**	.32**	1

Note. N = 386. Political orientation was rated on a 5-point response scale ranging from 1 = left-wing to 5 = right-wing.

Table 3

Moderated Regression Model Predicting Effects of Victim Sensitivity and Self-Relevance Framings on Pro-Environmental Policy Support (Study 1)

Predictors	Estimate	SE	<i>t</i>	<i>p</i>
Observer Sensitivity	.41	.08	4.919	<.001
Beneficiary Sensitivity	.21	.08	2.446	.02
Perpetrator Sensitivity	-.03	.08	-0.367	.86
Victim Sensitivity	-.25	.14	-3.28	<.001
Dummy: No Self-Relevance vs. Self-Relevance	-.23	.14	-1.589	.11
Victim Sensitivity x Dummy	.22	.14	1.526	.13

Note. $N = 386$. Study variables were standardized. Dummy: No Self-Relevance = 0, Self-Relevance = 1.

Table 4*Descriptive Statistics and Reliability Measures of the Study Variables (Study 2)*

Study variables	N	Min.	Max.	<i>M</i>	<i>SD</i>	α
Victim Sensitivity	617	1	6	3.93	.94	.88
Observer Sensitivity	617	1	6	4.01	.93	.90
Beneficiary Sensitivity	617	1	6	3.88	.99	.90
Perpetrator Sensitivity	617	1	6	4.76	.85	.90
Group Identification	617	1	6	3.16	.93	.91
Social Dominance Orientation	617	1	6	2.37	1.04	.61
Right-Wing Authoritarianism	617	1	6	2.52	.85	.83
Political Orientation	615	1	6	3.08	1.15	-
Self-Efficacy	617	1	6	3.53	1.34	-
Self-Reported Knowledge	617	1	6	4.30	1.13	-
Trust in Source	617	1	6	4.46	1.13	-
Pro-Environmental Engagement	617	1	3	1.80	.56	.75

Note. Response scale for pro-environmental engagement ranged from 1-3. The remaining scales ranged from 1 to 6.

Table 5*Zero-Order Correlations of the Study Variables and Control Variables (Study 2)*

Study Variables		A	B	C	D	E	F	G	H	I	J	K	L
Victim Sensitivity	(A)	1											
Observer Sensitivity	(B)	.47**	1										
Beneficiary Sensitivity	(C)	.22**	.64**	1									
Perpetrator Sensitivity	(D)	.08*	.51**	.70**	1								
Group Identification	(E)	.08	-.09*	-.04	-.08	1							
Social Dominance Orientation	(F)	-.03	-.33**	-.30**	-.32**	.23**	1						
Right-Wing Authoritarianism	(G)	.11**	-.20**	-.13**	-.22**	.44**	.49**	1					
Political Orientation	(H)	.03	-.23**	-.19**	-.16**	.30**	.54**	.48**	1				
Self-Efficacy	(I)	-.07	.18**	.20**	.20**	.06	-.08*	-.09*	-.16**	1			
Self-Reported Knowledge	(J)	-.04	.14**	.09*	.15**	-.10*	-.17*	-.17**	-.16**	.17**	1		
Trust in Source	(K)	.07	.27**	.26**	.22**	.01	-.28**	-.16**	-.23**	.15**	.15**	1	
Pro-Environmental Engagement	(L)	.01	.35**	.27**	.25**	-.18*	-.44**	-.34**	-.48**	.31**	.32**	.27**	1

Note. $N = 617$. ** $p < .01$; * $p < .05$.

Table 6

Moderated Regression Model Predicting Effects of Victim Sensitivity and Self-Relevance Framing on Pro-Environmental Engagement (Study 2)

Predictors	Estimate	SE	<i>t</i>	<i>p</i>
Observer Sensitivity	.40	.06	7.070	<.001
Beneficiary Sensitivity	.02	.06	0.387	.70
Perpetrator Sensitivity	.03	.06	0.548	.58
Victim Sensitivity	-.15	.04	-3.356	<.001
Dummy 1: Control vs. Individual Relevance	.15	.10	1.584	.11
Dummy 2: Control vs. Group Relevance	.04	.10	0.463	.64
Victim Sensitivity x Dummy 1	-.13	.10	-1.401	.16
Victim Sensitivity x Dummy 2	-.03	.09	-0.269	.80

Note. $N = 617$. Study variables were standardized. Dummy 1 (Control = 0, Individual Relevance = 1, Group Relevance = 0), Dummy 2 (Control = 0, Individual Relevance = 0, Group Relevance = 1).

Table 7

Moderated Regression Model Predicting Effects of Victim Sensitivity, Group Relevance Framing, and Group Identification on Pro-Environmental Engagement (Study 2)

Predictors	Estimate	SE	<i>t</i>	<i>p</i>
Observer Sensitivity	.38	.06	6.740	<.001
Beneficiary Sensitivity	.03	.06	0.592	.59
Perpetrator Sensitivity	.02	.06	0.437	.66
Victim Sensitivity	-.13	.04	-2.949	<.01
Group Identification	-.13	.04	-3.265	<.01
Dummy 1: Control vs. Individual Relevance	.12	.10	1.262	.21
Dummy 2: Control vs. Group Relevance	.02	.09	0.249	.80
Victim Sensitivity x Dummy 1	-.12	.09	-1.232	.22
Victim Sensitivity x Dummy 2	-.03	.09	-0.344	.73
Victim Sensitivity x Group Identification	.06	.04	1.536	.13
Group Identification x Dummy 2	.09	.08	1.156	.25
Victim Sensitivity x Dummy 2 x Group Identification	-.02	.08	-0.290	.77

Note. $N = 617$. Study variables were standardized. Dummy 1 (Control = 0, Individual Relevance = 1, Group Relevance = 0), Dummy 2 (Control = 0, Individual Relevance = 0, Group Relevance = 1).

Table 8*Descriptive Statistics and Reliability Measures of the Study Variables (Study 3)*

Study variables	N	Min.	Max.	<i>M</i>	<i>SD</i>	α
Victim Sensitivity	278	1	6	3.90	.92	.88
Observer Sensitivity	278	1	6	4.17	.96	.92
Beneficiary Sensitivity	278	1	6	3.98	1.09	.93
Perpetrator Sensitivity	277	1	6	4.77	1.00	.90
Perceived Exploitation	278	1	6	3.91	1.06	.75
Self-Efficacy	278	1	6	4.64	1.27	.84
Group-Efficacy	278	1	6	4.10	1.37	.91
Right-Wing Authoritarianism	276	1	6	2.55	.88	.82
Social Dominance Orientation	278	1	6	2.39	1.97	.64
Political Orientation	277	1	6	3.13	1.12	-
Pro-Environmental Policy Support	278	1	6	4.12	1.13	.84
Pro-Environmental Protest Behaviour	278	1	6	2.59	1.37	.84

Note. All response scales ranged from 1-6.

Table 9*Zero-Order Correlations of the Study Variables and Control Variables (Study 3)*

Study Variables		A	B	C	D	E	F	G	H	I	J	K	L
Victim Sensitivity	(A)	1											
Observer Sensitivity	(B)	.46**	1										
Beneficiary Sensitivity	(C)	.26**	.76**	1									
Perpetrator Sensitivity	(D)	.15*	.68**	.77**	1								
Perceived Exploitation	(E)	.22**	.05	.05	.05	1							
Self-Efficacy	(F)	-.07	.15*	.22**	.18**	-.17**	1						
Group-Efficacy	(G)	.00	.20**	.23**	.21**	-.18**	.56**	1					
Right-Wing Authoritarianism	(H)	.16**	-.09	-.14*	-.20**	.09	-.10	-.15*	1				
Social Dominance Orientation	(I)	.10	-.23**	-.23**	-.24**	.04	-.17**	-.11*	.47**	1			
Political Orientation	(J)	.10	-.29**	-.34**	-.27**	.01	-.23**	-.26**	.49**	.52**	1		
Pro-Environmental Policy Support	(K)	-.09	.27**	.30**	.25**	-.14*	.52**	.49**	-.08	-.22**	-.35**	1	
Pro-Environmental Protest	(L)	-.08	.29**	.26**	.16**	-.12*	.44**	.37**	-.08	-.19**	-.34	.65**	1

Note. $N = 278$. ** $p < .01$; * $p < .05$.

Table 10

Moderated Regression Model Predicting Effects of Victim Sensitivity and Descriptive Norm Framings on Pro-Environmental Engagement (Study 3)

Predictors	Support	Protest
Observer Sensitivity	.25* (.09)	.45** (.10)
Beneficiary Sensitivity	.18† (.10)	.16 (.10)
Perpetrator Sensitivity	-.02 (.09)	-.22* (.09)
Victim Sensitivity	-.25** (.07)	-.29** (.07)
Dummy 1: Low Descriptive Norm vs. High Descriptive Norm	.05 (.12)	.00 (.11)
Victim Sensitivity x Dummy 1	-.22† (.11)	-.15 (.11)

Note. $N = 278$. Study variables were standardized. Values are regression weights. Standard errors in parentheses. Dummy 1: Low descriptive norm condition = 0, High descriptive norm condition = 1. ** $p < .01$; * $p < .05$; † $p < .10$

9. Final Discussion

Ample research has investigated how perceptions of morality and justice are related to political attitudes and behaviour. For instance, insights in the field of moral psychology revealed that interindividual differences in concerns for moral domains like “care” or “loyalty” are associated with political orientation. That said, recent findings indicate that we need to “put things into perspective” when examining the link between moral judgments and political attitudes and behaviour. Studies found that a sensitivity to perceiving injustices from a victim’s perspective – or *victim sensitivity* – is associated with a right-wing political orientation, anti-immigration attitudes and a reluctance to engage in pro-environmental behaviour (Nicolai et al., 2022; Rothmund et al., 2020). The present research program was designed to examine the association of VS with political attitudes and behaviour as well as underlying motivational and social-cognitive processes that can explain this association.

9.1 Overview of the Research Projects

In the first research project, I extrapolated the conceptual idea of victim (justice) sensitivity to various moral norms (i.e., “foundations”) relevant in the political domain to (a) examine whether people differ in their sensitivity to perceiving oneself as a victim or others as victims across various moral transgressions and (b) test whether this difference is meaningfully related to political orientation as well as specific political attitudes. To this end, I developed a new instrument that captures people’s sensitivity to moral norm transgressions from a victim’s, an observer’s, a beneficiary’s, and a perpetrator’s perspective. Findings discussed in Manuscript 1 revealed that integrating moral foundations with (justice sensitivity) perspectives has theoretical and psychometric value, corroborating the idea that people harbour a perspective-specific sensitivity to moral transgressions. Regarding the victim-perspective, these findings indicate that VS might incorporate a self-oriented concern

for moral transgressions in general (both on individual- and group-level), and not specifically a self-oriented (individual) concern for justice.

The second project examined the relationship between VS and anti-immigration attitudes and behaviour. Findings discussed in Manuscript 2 indicate that VS causally predicts anti-immigration attitudes and that this effect leads to downstream consequences on antisocial behaviour towards immigrants. Attempts to scrutinize the psychological process by diminishing victim-sensitives' fear of exploitation were unsuccessful. The positive association between VS and anti-immigration attitudes and behaviour remained relatively stable even when individuals were confronted with evidence that immigrants do not (or will not) exploit the resources or productivity of the in-group. This is an indication that the social-cognitive mechanisms underlying VS are either not easily manipulated in this context or are not as theoretically assumed.

Finally, in the third project, I proposed and tested two motivational pathways that aim to explain when and why VS fosters or impedes collective pro-environmental engagement. In sum, findings discussed in Manuscript 3 revealed more evidence for the "passive protection pathway" (a tendency to disengage from collective political engagement due to a heightened fear of exploitation) than for the "active protection pathway" (a tendency to show collective pro-environmental engagement due to a perception that one will be directly disadvantaged by climate change consequences).

Taken together, the three research projects offer novel empirical insights pertaining to the psychological processes that explain the association between the sensitivity to moral transgressions from a victim's perspective and political attitudes and behaviour. In the following, I discuss insights into the role of victim sensitivity in the moral domain, implications for the Sensitivity to Mean Intentions Model, the relevance of victim sensitivity in intra- and intergroup settings, and the practical relevance of victim sensitivity in societal contexts.

9.2 Perspective-Specific Moral Sensitivity

9.2.1 Self-Oriented Moral Sensitivity

The concept of victim (justice) sensitivity was developed based on the assumption that "...individuals may not only differ in their tolerance versus sensitivity to physical stimuli, frustration, ambiguity, reward, and punishment, but also in their tolerance of moral norm violations and injustice." (Schmitt et al., 2005, p. 4). While a host of research on JS provides evidence for interindividual differences in a sensitivity to justice norm violations, the current findings indicate that people differ in their sensitivity to violations across different moral norms or "foundations" (i.e., "moral sensitivity"). The results reported in Manuscript 1 suggest that the *perspective-specific* approach introduced in the justice sensitivity literature is transferrable to other moral norms. In line with the JS literature, people seem to differ in their sensitivity to perceiving oneself as a victim or others as victims of moral transgressions.

The present results inform us about the scope of the victim sensitivity construct and its relevance in the moral domain. With the development of the "Sensitivity to Befallen Injustice" construct (later renamed "victim sensitivity), it was assumed that "...individuals differ consistently across a wide range of situations in their sensitivity to unjust treatment" (Schmitt, 1996, p. 9). Yet, the instrument that is currently used to capture VS only focuses on transgressions of certain justice principles in interpersonal situations (i.e., not getting something that one deserves or being exploited by others; Schmitt et al., 2010). The present findings suggest that VS includes a "self-oriented sensitivity" to a variety of transgressions relating to one's rights, freedoms and well-being as well as subjective moral standards about authority, loyalty, and sanctity. Thus, these findings are an indication that VS might be a relevant variable to explain a host of (antisocial) cognitions and behaviours across moral contexts, including for instance, religious extremism, preference for tribalism, and the oppression of minorities.

Findings in Manuscript 1 regarding the association between self-oriented moral sensitivity and political orientation and attitudes corroborate prior research showing that VS is related to a preference for populist right-wing political actors, anti-immigration attitudes, and right-wing authoritarianism (Rothmund et al., 2020). Past research explains these associations mainly from a relative deprivation perspective. More precisely, VS is described as a dispositional tendency to expect that one will be deprived of relevant resources (i.e., symbolic or material) relative to other groups (i.e., for instance due to exploitative intentions by immigrants). This expectation then translates into antisocial attitudes and behaviour (see Manuscript 2) and a preference for political actors who prioritize the in-group and its resources (Rothmund et al., 2020). Findings reported in Manuscript 1 allude to the notion that the association of VS with typically conservative attitudes might not just be due to perceived relative deprivation but due to moral parochialism; a “moral regard directed toward socially closer and structurally tighter targets, relative to socially more distant and structurally looser targets” (Waytz et al., 2019, p. 2). The present results indeed indicate that victim sensitives tend to moralize self-related issues more than other-related issues. Specifically, results in Manuscript 1 suggest that victim-sensitive individuals deem moral transgressions that affect them personally or their in-group as more “relevant” when judging situations to be “right or wrong” than when the same transgressions affect others. Moral parochialism is related to political conservatism as a conservative belief system usually stresses the interests, well-being, and security of the in-group (Waytz et al., 2019). Exploratory analyses further support this assumption as specifically self-oriented binding foundations (in-group-oriented norms) were related to right-wing orientation and anti-immigration attitudes. The notion that VS is related to moral parochialism is also in line with theoretical assumptions regarding the VS construct, which postulate that victim-sensitive individuals harbour self-oriented moral concerns (Gollwitzer et al., 2005).

The current findings inform us about the conceptual scope of the VS construct as well as its relevance for political orientation. The present empirical insights might be a first indication that VS incorporates not just a sensitivity to being disadvantaged (Schmitt et al., 1995), but a more general self- and in-group oriented moral concern. From a “political perspective,” VS might therefore not only be associated with a preference for right-wing politics because of a fear of being disadvantaged (Rothmund et al., 2020) but because of a dispositional preference for an in-group focused political ideology (i.e., nationalism; Faist, 2012).

9.2.2 Moral Perspectives or Foundations?

To capture people’s perspective-specific sensitivity to moral norms (i.e., “foundations”), I developed a new instrument: the “Moral Perspectives and Foundations Scale” (MPFS). The integration of moral foundations and (justice sensitivity) perspectives came with some methodological challenges, which are theoretically informative. A host of research suggests that moral foundations do not represent distinct psychological dimensions (for meta-analytic evidence, see Kivikangas et al., 2021). In fact, MFT does not assume that moral foundations represent completely distinct “modular” moral concerns (i.e., psychological dimensions) as they are suggested to be intuitions that develop differently (for instance in overlapping ways) depending on factors like upbringing and culture (Haidt & Joseph, 2011). Adapting items capturing specific moral foundations to perspectives likely exacerbated the conceptual conflation of different moral concerns. For instance, framing items from a victim’s perspective increased the risk of watering the moral foundations down to one moral domain, namely harm. As “victimization” implies an objective infliction of harm (i.e., the mirror image of perpetration), and “victimhood” defines “the psychological experience and consequences of such harm” (Noor et al., 2017, p. 121), rating any moral foundations

item from the victim's perspective might reflect a degree of perceived harm caused by a moral transgression.

While this represents a challenge in capturing a perspective-specific sensitivity to specific moral foundations¹⁹, this methodological challenge also informs us about the centrality of "perspectives" in moral judgments. According to the "Theory of Dyadic Morality" (TDM; Schein & Gray, 2015, 2018), moral judgments always involve two perceived and causally connected minds, an intentional agent causing damage (i.e., harm) to a vulnerable patient. Based on this notion, endorsements of certain moral foundations are nothing more than differences in perceived harm caused by norm violations - or in other words, when acts seem harmful, they seem morally wrong. Thus, TDM assumes that liberals and conservatives differ in their endorsements of binding foundations because conservatives perceive violations of moral values, such as "patriotism" or "chastity" as more harmful (i.e., immoral) than liberals. The present findings support and extend the notion of "dyadic morality," indicating that people might not only differ in their propensity to perceive harm (i.e., immorality) based on specific norm violations, but based on one's (perceived) positionality in the "moral dyad", including the position of an "intentional agent," a "vulnerable patient," or the position of someone observing the "moral dyad." In this sense, it is conceivable that people for instance differ in how immoral (i.e., harmful) they regard others disrespecting one's own faith versus oneself disrespecting others' faith. This notion was supported by current findings showing that conservatives were sensitive to violations of binding foundations when they were framed from a victim's perspective, and that liberals were sensitive to the violations of the same foundations when they were framed such that they affected others.

¹⁹ Analyses revealed high intercorrelations between items in the "Moral Perspectives and Foundations Scale."

9.2.3 Avenues for Research on Moral Sensitivity

The findings in Manuscript 1 provide a theoretical and methodological foundation to further explore individual differences in moral judgments. Manuscript 1 showed that an integrated foundations x perspective approach offers psychometric value. However, future research should consider improving the proposed instrument capturing a perspective-specific sensitivity to moral foundations. Validation studies should investigate the construct validity of the moral sensitivity questionnaire. This includes the convergent, nomological, and discriminant validity of the moral sensitivity construct (cf. Schmitt et al., 2010). Future studies should examine whether the perspectives in the moral sensitivity questionnaire correlate with the respective justice sensitivity perspectives and whether the foundations in the moral sensitivity questionnaire correlate with the respective foundations captured in the original Moral Foundations Questionnaire²⁰. On the other hand, the convergent and discriminant validity of the moral sensitivity construct should be tested against theoretically related constructs, such as the self-importance of moral identity, cognitions, and behaviour (Aquino & Reed II, 2002).

In addition, both justice sensitivity and moral foundations have been tested in various applied contexts. The perspective-specific moral foundations approach can thus be utilized to further our understanding of differences in moral judgments and their effects on various outcome variables. For instance, while prior research found that binding foundations negatively predicted pro-environmental attitudes (e.g., Baldner, 2018), it is conceivable that this relationship depends on people's perspective-specific sensitivity to binding foundations. While a self-oriented sensitivity to binding foundations might negatively relate to pro-environmental attitudes because this sensitivity represents a concern for in-group norms that need to be conserved and protected from any change, other-oriented sensitivity to binding

²⁰ For the adaptations of the Moral Foundations Questionnaire, some items needed to be completely altered to allow for a perspective-specific formulation (see Manuscript 1).

foundations might positively correlate with pro-environmental attitudes because this sensitivity represents a concern for the norms of other groups, which might be affected by climate change.

Whereas the current research and theoretical discussion predominantly “imposed” perspectives on moral foundations, future studies could also examine the idea that the extent to which people harbour a self-oriented (i.e., victim) sensitivity to moral violations systematically varies as a function of the moral domain (or “foundation”) in which the violations occur. For instance, based on the current findings, people might be “victim-sensitive” to specific moral violations but not to others. Here, it would be interesting to explore cultural differences. For instance, among people who live in religious societies, it might be that particularly a self-oriented sensitivity to violations of the sanctity foundation leads to antisocial behaviour. On the other hand, among people who live in particularly “individualizing societies,” in which *personal* rights and freedoms are prioritized, it might be that particularly a self-oriented sensitivity to violations of the “individualizing foundations” (i.e., care and fairness) lead to antisocial behaviour.

9.3 Insights on the SeMI Model

9.3.1 The Fear of Exploitation in the Political Arena

The Sensitivity to Mean Intentions Model (SeMI model; Gollwitzer et al., 2013) describes social-cognitive and motivational processes that can explain why and when VS translates into (political) attitudes and behaviour. Manuscripts 2 and 3 used different political contexts to test theoretical predictions derived from the SeMI model. First, the model postulates that VS entails a latent fear of being exploited. In this case, exploitation is defined as the perception that a social exchange scenario was intentionally influenced by another exchange party in such a way that this party gained due to one’s own loss (i.e., one has been “duped”; Vohs et al., 2007). Findings in both Manuscript 2 and 3 provide support for this

hypothesis in different political and social contexts. In Manuscript 2, I tested this assumption in the immigration context, whereby the welfare state represented the social exchange scenario (cf. Mau, 2004). Study 2 showed that VS was related to the perception that immigrants intend to come to Germany to unilaterally profit from the German welfare system. In Manuscript 3, this assumption was tested in the collective action context. Here, collective engagement for the public good (i.e., environmental protection) represented the social exchange scenario (cf. Heckathorn, 1996). Study 3 revealed that VS was related to an increased expectation that fellow citizens would intentionally refrain from political engagement to unilaterally profit from one's own engagement. Both findings show that VS is related to an anxious expectation that another party will intentionally influence a social exchange scenario to profit from one's own losses or investment. Additionally, these findings indicate that victim-sensitive individuals fear the exploitation of different types of resources. This includes monetary resources (as shown in Manuscript 2) as well as more abstract resources like political engagement (as shown in Manuscript 3). Further, the results suggest that individuals high in VS expect exploitation in different social exchange scenarios in intergroup (Manuscript 2) as well as intra-group settings (Manuscript 3). I discuss the group-specific insights regarding VS in the following section. Together, these results indicate that victim-sensitive people harbour a dispositional tendency to anxiously expect exploitative intentions by others across different social and political contexts.

The SeMI model posits that victim-sensitive individuals tend to defect in social exchange scenarios to avoid exploitation (Gollwitzer et al., 2013). More specifically, in exchange scenarios, such as social dilemmas, people high in VS weigh untrustworthiness cues more than trustworthiness cues, and the perception of untrustworthiness elicits an antisocial cognitive scheme (i.e., suspicious mindset) among victim-sensitive individuals. This in turn leads to antisocial tendencies to avoid being "duped" (Gollwitzer et al., 2013). Taken together, it is assumed that the underlying psychological process driving the effect of VS on

antisocial cognitions and behaviour is a latent fear of exploitation (Gollwitzer et al., 2009, 2013a). In Manuscripts 2 and 3, I tested this assumption in different social and experimental contexts. Correlational findings supported this assumption. Specifically, in the context of immigration (Manuscript 2) I found that the effect of VS on antisocial tendencies towards immigrants was mediated by the expectation that immigrants harbour exploitative intentions and in the climate action context (Manuscript 3), I found that the effect of VS on decreased pro-environmental engagement was mediated by a heightened expectations that fellow citizens would exploit one's political engagement. However, attempts to scrutinize the *causal* role of exploitation intentions as the psychological mechanism driving the effects of VS on antisocial behaviour (i.e., studies manipulating fear of exploitation experimentally) were unsuccessful. In Manuscripts 2 and 3, I chose to scrutinize the psychological mechanism by “switching off” the assumed psychological process (cf. Jacoby & Sassenberg, 2011) expecting that – based on the mentioned theoretical assumptions – this should significantly diminish the effects of VS on antisocial attitudes and behaviour.

9.3.2 The Robustness of Fear

From a theoretical perspective, the failure to manipulate the fear of exploitation among victim-sensitive individuals indicates that it is difficult to diminish this fear. Clinical findings support this conjecture showing that a strong fear of exploitation is positively associated with pathological forms of mistrust including paranoid personality disorder (Carroll, 2009; Gollwitzer et al., 2013). Studies examining dispositional paranoia found that the disorder comes with a “spiral of escalating paranoia,” which includes (a) generalized suspiciousness (b) insinuating malign intent of others, and (c) the interpretation of apparently benign behaviour as deceptive strategy (Carroll, 2009; Lewis & Ridenour, 2020). Treatment was found to be difficult as paranoid thinking and behaviour can be remarkably resistant to change. As paranoia negatively affects therapist-patient relationships, the spiral of escalating

paranoia has been referred to as a self-sustaining, self-defeating cycle (Kramer, 1998). Based on these findings, it is conceivable that the suspicious mindset inherent to VS, which includes all psychological processes of the “spiral of escalating paranoia”, impedes the possibility of mitigating the fear of exploitation. Following the findings regarding dispositional paranoia, the attempts to diminish victim-sensitives’ fear of exploitation using trustworthiness cues (e.g., evidence suggesting cooperative intentions of immigrants in Manuscript 2 and cooperative intentions of fellow citizens in Manuscript 3) might not have been successful as victim-sensitive individuals could have perceived the stimuli signalling cooperative tendencies as misleading strategies.

Further, the findings of Manuscript 2 and 3 corroborate and extend the idea that victim sensitives weigh untrustworthiness cues more strongly than trustworthiness cues (“asymmetry hypothesis”; Gollwitzer et al., 2013). Based on this assumption, the attempt to “switch off” the assumed psychological mechanism by countering untrustworthiness cues with trustworthiness cues might have failed because victim-sensitive individuals prioritize environmental information that confirms their suspicious mindset over schema-incongruent information (Gollwitzer et al., 2015). Indeed, the present results showed that while subtle untrustworthiness cues sufficed to elicit antisocial tendencies among victim sensitive individuals, explicit and tangible evidence that indicated others’ trustworthiness did not suffice to diminish antisocial tendencies among people high in VS (Manuscript 2, Study 3). The current findings are also relevant in the contexts of prior studies, which showed that victim-sensitive individuals, whose fear of exploitation was activated by untrustworthiness cues were more likely to update their trustworthiness perceptions if a negatively labelled target turned out to show trustworthy behaviour (Süssenbach et al., 2016). Specifically, the present results indicate that trustworthy behaviour by an untrustworthy party might affect stronger cognitive change among victim-sensitive because this represents “surprising,” schema-incongruent behaviour (Süssenbach et al., 2016), however, schema-incongruent

information does not seem to diminish anti-social evaluations and behaviour towards the social exchange party, corroborating the robustness of victim-sensitives' protective tendencies (Gollwitzer et al., 2009).

Additionally, the current insights are relevant for the “buffer hypothesis” postulated in the SeMI model (Gollwitzer et al., 2013). This hypothesis predicts that situational buffers, such as strong social norms or personal buffers, such as high moral standards or self-regulation capacities should alleviate the effect of suspiciousness on antisocial behaviours. The present results suggest that a single situational stimulus might not be sufficient to “buffer” the antisocial tendencies among victim-sensitive people. Victim sensitivity is a trait that comes with stable antisocial cognitive processes and according behavioural scripts that have been developed due to repeated experiences of injustice (Gollwitzer et al., 2015). Based on this assumption, it might be necessary to expose victim-sensitive individuals to repetitive situations including cues suggesting cooperative intentions by the social exchange party to diminish the fear of exploitation. Research has shown that one-shot social dilemma scenarios, such as those applied in Manuscripts 2 and 3 might not be enough to motivate cooperation as cooperative norms emerge dynamically over time and in an interplay of factors, such as shared social identity and pre-existing social norms (e.g., Titlestad et al., 2019). This development might take even longer for victim-sensitive individuals who harbour a dispositional expectation that others are uncooperative.

Finally, it is possible that other variables besides an underlying fear of exploitation affect the relationship between VS and antisocial behaviour towards other parties in social exchange scenarios. Specifically, in the context of immigration it is conceivable that victim-sensitives' aversion towards uncertainty drives the effect of VS on anti-immigration attitudes and behaviour. Immigration is associated with increased social uncertainty and risks as immigrants usually represent an unfamiliar out-group who disrupt familiar norms (e.g., Williams & Baláž, 2012). While trustworthy behaviour (e.g., cooperation) might be sufficient

to diminish the fear of exploitation, it is possible that the “invalidation” of exploitative behaviour is not sufficient to reduce victim-sensitives’ fear of uncertainty. This would explain why exposing victim-sensitive individuals to ostensibly cooperative behaviour by immigrants did not suffice to reduce negative evaluations of and antisocial behaviour towards immigrants. Recent findings indicate that countering social uncertainty with a sense of control alleviates defensive reactions of victim-sensitive individuals in interpersonal situations (Buchholz et al., 2023). On the other hand, in the context of climate action, it is plausible that the fear of exploitation is accompanied by legitimization strategies that drive victim sensitives’ reluctance to engage in collective action. Based on assumptions of the SeMI model, people high in VS tend to engage in cognitive strategies to justify (in front of themselves and others) self-protective antisocial strategies. In support of this, it was recently found that victim-sensitive individuals refrain from pro-environmental behaviour due to a tendency to morally disengage (Nicolai et al., 2022). Disengagement strategies might therefore be a pertinent psychological mechanism among victim-sensitive individuals in the context of collective political engagement.

9.3.3 Avenues for Research on the SeMI Model

Future research could build upon the research designs and findings of Manuscripts 2 and 3. Based on the assumption that a fear of exploitation is the main psychological mechanism driving antisocial tendencies of victim-sensitive individuals in social exchange scenarios with seemingly untrustworthy exchange parties (Gollwitzer et al., 2013), studies could adapt the study designs used in Manuscripts 2 and 3, in which the psychological process was scrutinized by “switching off” the fear of exploitation. First, while I attempted to invalidate the fear of exploitation by providing information on cooperative behaviour of the social exchange party (e.g., immigrants paying tax or fellow citizens contributing to the public good) this might not be sufficient to negate the expectations that this party harbours

exploitative intentions. In line with the notion that victim-sensitive individuals tend to infer ulterior motives (Gerlach et al., 2012; Gollwitzer et al., 2005), it is conceivable that people high in VS could expect that social exchange partners are cooperating at first to project a “cooperative image” in order to exploit in the future. Thus, to invalidate victim-sensitives’ fear of exploitation, it might be necessary to combine the cooperative behaviour with information that increases the trustworthiness of the other party. For instance, in an experimental design akin to Study 3 in Manuscript 2, an additional experimental condition could combine information on the cooperative performance of the out-group members with information that decreases the risk of ulterior (exploitative) intentions. This could be done by letting participants “overhear” an interaction of participants in an out-group, in which these participants communicate their cooperative intentions. Based on theoretical considerations, one could hypothesize that victim-sensitives’ fear of exploitation will only be “invalidated” and thus antisocial tendencies will only be significantly reduced when objective information on cooperative behaviour is paired with information on others’ cooperative intentions.

As discussed above, one-shot economic games might not be enough to diminish the fear of exploitation among victim-sensitive individuals. Rather, it might be necessary to administer various iterations of said scenarios to reduce the fear of exploitation and to decrease the antisocial tendencies among people high in VS. Experimental conditions could vary the frequency of the cooperative behaviour shown by the social exchange party (or parties) in several iterations of the economic game. Based on the theoretical discussion above, one might hypothesize that victim-sensitives’ positive evaluation of and prosocial behaviour towards the social exchange party will only increase when they experience several iterations of cooperative behaviour by the social exchange party (or parties).

Future research could also investigate to what extent other variables influence the relationship between VS and antisocial tendencies in social exchange situations. Based on the idea that victim-sensitive individuals harbour an aversion towards social uncertainty

(Buchholz et al., 2023; Gollwitzer et al., 2009), studies could test whether decreasing perceived social uncertainty can diminish the effect of VS on antisocial evaluations of and behaviour towards social exchange parties. This could be done by manipulating situational as well as personal factors. Prior research showed that social uncertainty can be reduced by different forms of social learning: For instance, people perceived less social uncertainty in social exchange scenarios when they received repeated first-hand information (i.e., observing iterations of others' behavioural patterns) or second-hand information (i.e., descriptions of others' behavioural patterns) about the social exchange party (or parties) (FeldmanHall & Shenhav, 2019). Translating those ideas to concrete study designs, iterations of economic games (as described above) could help reduce both a fear of exploitation as well as social uncertainty among victim-sensitive individuals. Additionally, in order to reduce social uncertainty using second-hand information, an experimental condition could be added, in which the seemingly cooperative behaviour of the out-group is accompanied by information from in-group members confirming the out-group's cooperative behaviour. Regarding personal factors, studies could induce a personal sense of control to reduce uncertainty (cf. Buchholz et al., 2023). For instance, an experimental manipulation aimed at "invalidating" exploitation by providing information on others' cooperative behaviour could be accompanied by a control-affirming task found to reduce social uncertainty (Kay et al., 2008). Following this idea, it might be that only a combination of reducing fear of exploitation as well as an affirmation of control is needed to reduce the effect of VS on antisocial tendencies towards social exchange parties.

9.4 Victim Sensitivity in Intra- and Intergroup Settings

9.4.1 The Theoretical Framework for Victim Sensitivity in (Inter-) Group Contexts

This research program examined the psychological processes underlying VS in political intergroup and intragroup settings. The particular affordances of these settings and the effects of VS on group-specific cognitions and behaviours further inform us about theoretical assumptions regarding the VS facet. Recently, a theoretical framework was proposed, which makes predictions about whether, how, and why VS (and the other JS facets) should become relevant in group contexts (Baumert et al., 2022; Figure 2). In the following, I discuss how the findings of the current research program can be interpreted in the context of this theoretical framework.

The Theoretical Framework for Justice Sensitivity in Intergroup Contexts (Baumert et al., 2022) is built on the assumption that many of the individual-level processes inherent to VS (and the other JS facets) can become relevant for group-level process when individuals identify as members of a social group. It is suggested that group identification “shifts” psychological processes from the individual to the group level (Baumert et al., 2022).

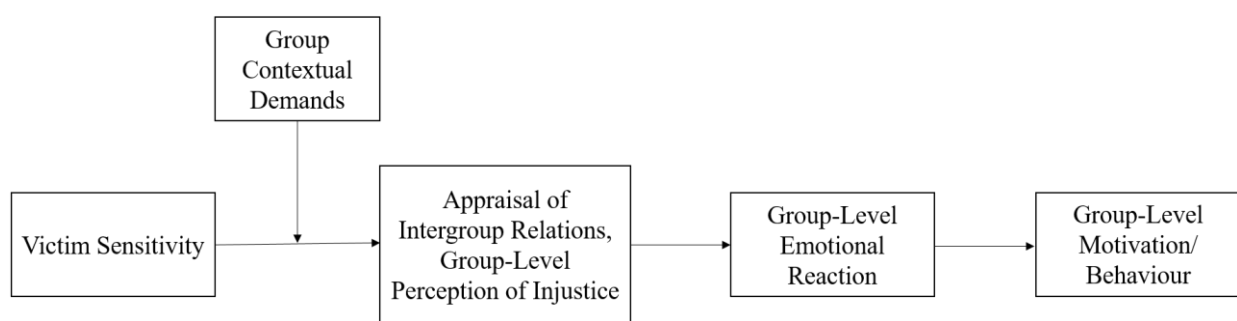


Figure 2. The Theoretical Framework for Victim Sensitivity in (Inter-) Group Contexts adapted from Baumert et al., 2022.

Following this idea, the framework proposes that – based on what we know about individual-level processes – victim-sensitives who identify with their in-group should harbour

a heightened concern for justice for the in-group. In the current research program, I find some evidence for the notion that VS can “shift” to the group-level. Manuscript 1 suggests that VS incorporates a sensitivity for different in-group norms or “binding foundations,” which strengthens the notion that VS is a relevant personality facet to explain group-level processes (Baumert et al., 2022). While past studies found that VS incorporates a concern for injustices that affect the in-group (Rothmund et al., 2017; Süßenbach & Gollwitzer, 2015), they did not inform us about whether VS indeed incorporates *group*-level perceptions or whether the in-group-oriented concerns are in fact *personal* concerns. The current insights suggest that VS includes an in-group oriented cognitive component, in that the sensitivity to victimization might indeed translate to the group-level (Baumert et al., 2022).

Further, results discussed in Manuscript 2 indicate that people high in VS (compared to low-VS people) were more attuned to in-group concerns. For instance, in Study 2 (Manuscript 2), German participants²¹ high in VS tended to perceive increased threat to Germany’s norms and prosperity due to immigration. In the context of a laboratory study (Study 3), the in-group was made salient using the minimal groups paradigm (Tajfel, 1970; Tajfel et al., 1971). Again, this study showed that victim sensitives were particularly concerned about the in-groups’ general well-being and the in-groups’ performance. Although these findings indicate that the self-oriented concerns among victim-sensitive individuals might “shift” to in-group-oriented concerns, the results are inconclusive as in-group-oriented concerns may just represent self-oriented concerns relating to the individual.

The theoretical framework postulates that group contextual demands like group positionality (i.e., whether the group is *advantaged*, *disadvantaged* or *unaffected*) influence the way VS affects intergroup appraisals and group-level perceptions of injustice and, in turn, downstream consequences on group-level emotions and behaviour. For *advantaged group*

²¹ All participants were German citizens.

members, contextual demands may afford the anticipation of future unjust disadvantage or loss of subjectively legitimate privilege (e.g., Jetten et al., 2015; Nelson et al., 2018). Based on victim-sensitives' concern for in-group justice, it is hypothesized that people high in VS should anticipate injustices towards the advantaged in-group and a fear of losing the status of an advantaged group. This should come with “an intense fear of exploitation, refusal of solidarity, the rejection of any other steps that could threaten one's group's standing [...] and the rejection of any responsibility for disadvantaged groups' circumstances” (Baumert et al., 2022, p. 21). In the immigration context, Studies 2 and 3 in Manuscript 2 indeed showed that participants high in VS (vs. low in VS) reported a stronger anticipation of injustices toward the advantaged in-group, a heightened fear of exploitation, and decreased solidarity with the disadvantaged. In the climate change context (Manuscript 3), the “advantaged in-group” was not made salient. However, given that cost-benefit allocations in the context of the climate crisis are distributed in favour of the global North (relative to the global South; Eriksen et al., 2021), it is likely that participants – who were mainly German – perceived themselves in an advantaged or in an unaffected position relative to other groups. In line with the assumptions of the framework, Studies 1-3 indicated a negative relation between VS and pro-environmental engagement, which can be interpreted as a refusal to show solidarity and a rejection of any responsibility for disadvantaged groups' circumstances. This notion is supported by the finding that VS is related to moral disengagement tendencies in the context of the climate crisis (Nicolai et al., 2022).

Further, the theoretical framework posits that the contextual demands of *disadvantaged groups* afford perceptions of past and/or ongoing unjust victimization (Baumert et al., 2022). Thus, VS should be related to such perceptions among highly identified members of disadvantaged groups. Due to victim sensitives' aversion towards victimization, individuals high in VS should “react with more intense anger to perceiving the in-group as unjustly victimized, and they should be inclined to engage in protest and aim to

redress the injustice. In other words, VS might be a personality predictor of engagement in collective action among the disadvantaged” (Baumert et al., 2022, p. 18). Studies 1 and 2 in Manuscript 3 tested this prediction and found that individuals high in VS (vs. low-VS) were *not* more inclined to (collectively) engage to counter climate change consequences when they perceived these consequences as in-group-relevant (i.e., group disadvantage). On the one hand, this can point towards the idea that – even though climate change consequences were perceived as in-group relevant – the climate crisis was perceived as even more of a threat to other groups, making the in-group relatively advantaged. On the other hand, these findings allude to the idea that different psychological processes inherent to VS can become relevant in group-contexts.

In group-based settings, VS could entail a conflict between personal and group-based concerns. For instance, it is suggested that victim sensitives’ fear of being personally exploited could impede group-based perceptions of injustice (Baumert et al., 2022). Indeed, literature on collective action shows that people can view political engagement as a form of social dilemma, in which intra-group exploitation is possible (e.g., Heckathorn, 1996). Thus, in group-contexts, victim-sensitive people could be torn between the motivation to act against perceived group-based injustices and wanting to avoid being the “sucker” who engages in collective action while others benefit from this engagement without contributing themselves. In Manuscript 3, I refer to the former psychological process as the “active protection pathway.” (i.e., victim-sensitive individuals collectively engage to avoid in-group-based disadvantage), and to the latter process as the “passive protection pathway” (i.e., victim-sensitive individuals refrain from collective engagement to avoid exploitation). The three studies, which were conducted in the climate action context, indicated that people high in VS (compared to low-VS people) were less inclined to show collective pro-environmental engagement. Correlational findings provided some evidence for the notion that this effect is indeed driven by a fear of being exploited by members of the in-group. Notably, perceived in-

group disadvantage due to climate change consequences did not motivate (highly identified) victim-sensitive individuals to engage in collective pro-environmental action. In addition, I examined whether people high in VS only engage in collective “active protection” when they perceive *personal* disadvantage due to climate change. We did not find empirical support for this hypothesis. These empirical insights suggest that the known psychological processes inherent to VS play out differently in interpersonal and intergroup contexts. Specifically, victim-sensitive individuals are likely forced to weigh different forms of injustices in group-based contexts. In the context of collective action, victim-sensitive individuals need to weigh the risks of being disadvantaged due to the political or societal matter at hand (i.e., climate change) and the risk of “internal” disadvantages, which can come about when acting for the public good.

9.4.2. Avenues for Research on Victim Sensitivity in Group Contexts

Group-based contexts are particularly interesting settings for future research on VS as past research in this field mostly focused on interpersonal relationships, and because theoretical considerations and first empirical insights indicate that group-specific affordances can advance our understanding of the motivational and social-cognitive processes inherent to VS. One avenue for future research would be to further investigate the role of VS in intergroup situations. First, based on the notion that group identification should “shift” the psychological processes inherent to VS to the group-level (Baumert et al., 2022), studies could examine to what extent participants’ identification with the in-group moderates the effect of VS on antisocial attitudes and behaviour towards a (potentially exploitative) out-group. Second, studies could examine under what conditions personal and group-based concerns drive the effects of VS in intergroup context. Economic games akin to Study 3 in Manuscript 2 could be adapted including one condition, in which immigrants can only exploit fellow in-group members, and another condition, in which immigrants can exploit participants

individually. Based on the theoretical framework introduced above, only victim-sensitive individuals who highly identify with the in-group should react sensitively (with antisocial reactions) in the first condition. In the second condition, VS should predict antisocial tendencies towards the out-group independent of group-identification.

Third, more research is needed to examine the “active protection pathway” and the “passive protection pathway” introduced in Manuscript 3. For instance, it is plausible that I did not find support for the “active protection pathway” because of the advantaged group positionality (i.e., Western individuals in the context of climate change). Future studies could examine whether VS is related to more intense anger and an increased inclination to engage in collective action among members of disadvantaged groups. On the other hand, more research needs to be conducted to examine the psychological processes underlying the “passive protection pathway.” Our attempt to scrutinize the assumed mechanism (i.e., fear of being exploited by in-group members) by “switching off” of the psychological process using a descriptive norm manipulation was not successful. Recently, it was shown that in-group mistrust plays less of a role among highly identified (vs. less identified) group members (Gollwitzer et al., 2021). Thus, it is conceivable that perceived intra-group cooperation in combination with increased group identification could diminish the fear of exploitation among victim-sensitive individuals in the context of political engagement.

9.5 Victim Sensitivity as a Societal Challenge?

The current dissertation highlights the relevance of VS in various moral and political contexts, provides insights into the motivational and social-cognitive processes that explain the association of VS with attitudes and behaviours in intra- and intergroup contexts as well as theoretical and methodological implications. While I attempted to remain descriptive in these accounts, the insights of this and prior research consistently indicate that VS includes a dispositional antisocial tendency that might represent a challenge for society.

Many societal challenges represent social dilemmas, broadly defined as scenarios in which short-term self-interest is at odds with longer-term collective interests (van Lange et al., 2013). Social dilemmas apply to a wide range of real-world problems, including the social welfare system, flu immunization, and environmental protection. Societal social dilemmas are challenging because many people need to cooperate to achieve collective long-term benefits for society. In addition, social dilemmas in societal contexts are particularly complex because they are typically characterized by a high degree of uncertainty. More specifically, it is often difficult to understand how many people are involved in this dilemma, the structural characteristics of the dilemma, and the “threshold” required to provide the public good (e.g., “when have we achieved environmental protection?”).

Many factors have been found to influence why people cooperate (or defect) in social dilemma scenarios, including structural or situational properties as well as psychological influences. One of the most prominent antecedents for defection is the expectation that others will not cooperate (e.g., van Lange et al., 2013). This is rather unsurprising, as cooperation represents an irrational behaviour when expecting that others will not cooperate in social dilemmas. The current research program suggests that particularly victim-sensitive individuals are prone to infer uncooperative intentions in diverse social dilemmas marked by a high degree of uncertainty, including immigration and climate action, which motivates them to defect. Based on the present findings, VS might be a challenge in the context of “first order dilemmas” (i.e. the initial dilemma) as well as “second order dilemmas” (i.e., the dilemma one might encounter when deciding whether or not to contribute to a costly system that might promote cooperation in the first order dilemma; Yamagishi, 1986). On the one hand, Manuscript 2 suggests that victim-sensitive people harbour a heightened expectation that others (e.g., immigrants) will not contribute to the social welfare system (i.e., “first order dilemma”) leading them to show uncooperative behaviour. On the other hand, Manuscript 3 provides first (though inconclusive) empirical support for the notion that people high in VS

even tend to refrain from contributing to a system that sanctions free riders because they expect that others will not engage in this “instrumental cooperation” (i.e., “second order dilemma”). In other words, victim-sensitive individuals expect that others will not contribute to developing a “cooperative norm,” and thus, refrain from contributing to the norm themselves. Together, these considerations suggest that VS can be a “direct” problem for social dilemmas in that victim-sensitive individuals might be more prone to refrain from contributing to the public good themselves, and a more “indirect” problem as victim-sensitive individuals might also complicate societal movements that aim to promote cooperative norms (e.g., climate action).

In addition, victim-sensitive individuals might be susceptible to political communication strategies that include “victimization components.” Experiencing (collective) victimization has been found to unify and mobilize (groups of) people (e.g., Jetten et al., 2020). Therefore, it is unsurprising that political communication strategies incorporate narrative components that focus (collective) victimizations²². For instance, research on the Alevis²³ in Europe suggests that the “Confederation of European Alevi Unions” (AABK) has systematically utilized collective victimhood experiences to unify and mobilize Alevis. An analysis of the AABK’s publications and press releases indicated that the confederation specifically focuses events in which Alevis have been victimized (e.g., terrorist attacks specifically affecting Alevis; Yildiz & Verkuyten, 2011). In the context of the yellow vest movement in France, austerity measures introduced by President Emmanuel Macron were framed in terms of attacks on the French national identity, contributing to a shared feeling of

²² The included practical examples (AABK, the yellow vest movement, and the “Querdenken” movement) are used to describe the application of victimization elements in various political communication contexts as well as (potential) psychological and behavioural consequences. This dissertation does not evaluate the presence and/or legitimacy of any actual, communicated or perceived victimization.

²³ The term “Alevis” refers to a large number of heterodox Muslim Shi’a communities with different characteristics.

victimhood, and, in turn, enhanced collective mobilization (Jetten et al., 2020). Moreover, the German “Querdenken” movement, which was born in the summer of 2020 as a collective protest against political policies to counter the spread of “Covid-19”²⁴ emphasized the victimizing nature of the policies, deliberately disadvantaging certain groups (e.g., Prattes, 2023). Crucially, perceived victimization can lead to downstream consequences that exacerbate (inner-) societal conflicts. For instance, the perception of being victimized can lead to enhanced social categorization (i.e., stronger feelings of “us” versus “them”), which can spur animosities and aggressive behaviours (Jetten et al., 2020). Based on the current and prior research we know that victim-sensitive individuals harbour a dispositional vigilance towards cues that suggest (collective) victimization making victim-sensitive individuals (potentially) more susceptible and sensitive to political “victimhood narratives.” These insights combined with empirical findings suggesting that particularly victim-sensitive individuals are willing to use non-normative (i.e., violent) means to avoid victimization (Macdougall et al., 2018), might indicate that VS represents a risk factor for political radicalisation and extremism.

Perceiving victimization is not necessarily a bad thing. Experiencing (group-based) disadvantages and a motivation to engage in collective action can facilitate desirable social change. In this regard, more research is needed to understand the relationship between VS and social engagement among disadvantaged groups as discussed in the previous chapter. For instance, it is plausible that, among (objectively) disadvantaged individuals, VS might be associated with an increased persistence, resilience, and motivation to achieve social change (i.e., remove victimization). Nevertheless, taken together, the current empirical insights and theoretical considerations suggest that justice-related personality factors – and specifically VS – might represent a challenge for our society. The wide range of social contexts in which VS

²⁴ Covid-19 is a contagious disease caused by the virus SARS-CoV-2. The disease quickly spread worldwide, resulting in the COVID-19 pandemic from 2020 – 2023.

could lead to detrimental consequences further highlights the importance of conducting basic and applied research to understand the psychological processes underlying VS as well as possible downstream consequences in various social and political contexts. Intervention-focused research could use the current and prior empirical insights to develop interventions to decrease VS and, in turn, the likelihood of detrimental consequences. As the studies in this research program suggest that antisocial tendencies among victim-sensitive individuals are rather robust and not easily altered by situational countermeasures, practitioners could develop and test interventions that aim to reduce the risk of developing increased VS in earlier stages of development. This could include educational formats in which children and young adults learn to trust and cooperate with others in situations of social uncertainty.

9.6 Limitations

The studies conducted in the context of this dissertation include limitations that need to be considered when interpreting the results of this research program. First, the results reported and discussed in this dissertation are based on samples from “WEIRD” societies (i.e., Western, Educated, Industrialized, Rich, and Democratic; Henrich et al., 2010) including predominantly young and politically left-leaning participants. As many findings, including basic perceptual findings, do not generalize outside of WEIRD contexts (Henrich et al., 2010), further research in non-WEIRD societies needs to be conducted to provide evidence for the generalizability of the effects. For instance, the relationship between VS and anti-immigration attitudes and behaviour could be different depending on structural aspects. The current projects focused on how members of a high-status group react to potentially exploitative, less powerful groups. However, whether VS predicts intergroup attitudes and behaviour among members of lower status groups needs to be addressed using appropriate samples.

Next to the importance of representative samples and representative societies (i.e., political systems) it has been stressed that research in the field of political and moral

psychology needs to consider the use of representative stimuli (Brandt & Wagemans, 2017). More specifically, when research focuses on particular societal topics or events, the stimuli will not be representative as the inferences will be limited to that particular topic or event. Considering the current study designs, I am more confident with respect to the representativeness of stimuli in the “immigration context” than in the “collective action” context. The research project described in Manuscript 2 used a variety of stimuli that are not restricted to one historical event to test the association of VS and anti-immigration tendencies. However, research endeavours that aim to test the relationship between VS and collective action should administer stimuli, which use different topics than climate change. One limitation in this regard could have been that there are ongoing public debates concerning pro-environmental activism in Germany. Specifically, the pro-environmental activist group “Last Generation” has prompted an emotionally charged public discourse regarding climate activism, which could have influenced the current findings.

In addition, apart from Study 1 in Manuscript 2, most of the results reported in this research program are correlational. More research needs to be conducted to examine whether VS causally affects political attitudes and behaviour. It is typically assumed that personality facets influence political outcome variables because people’s personality is said to develop early in life and remains stable across time and situations (e.g., Blais & St-Vincent, 2011). However, research has challenged this assumption by providing evidence that “political attitudes” regarding allocation of resources, hierarchy, and leadership develop in early childhood (e.g., Block & Block, 2006), and that there are genetic influences on political attitudes (e.g., Eaves & Hatemi, 2008). Thus, more longitudinal cross-lagged designs can help to understand whether dispositional VS predicts people’s political attitudes and behaviour. More complex models could also investigate whether the interaction between VS with environmental influences shapes the formation of political orientation and behaviour over time (cf. Carney et al., 2008).

Furthermore, the conducted studies relied on self-report measures to measure personality and to operationalize political orientation, attitudes, and behaviour. As these measures are prone to demand characteristics, future research could administer observer-reports to capture victim (justice) sensitivity and behavioural measures to operationalise political outcome variables. For instance, future studies could capture people's actual engagement in political behaviour, including collective (e.g., environmental) protest behaviour and engagements in activist groups.

10. Conclusion

Human societies are complex systems in which people must deal with diverse challenges relating to interpersonal and intergroup conflicts, resource scarcity, and oppression. In the context of these challenges, victim sensitivity can represent an adaptive personality characteristic. A heightened vigilance towards cues that suggest exploitation, a hesitant approach to untrustworthy people or groups, and cautious behavioural tendencies can help in dealing with many problems posed by the above-mentioned challenges. However, as this dissertation shows, victim sensitivity might represent a societal challenge in and of itself. Throughout this research program, I was able to show that VS incorporates self-protective tendencies that translate into robust antisocial political attitudes and behaviours. From a theoretical perspective, these insights contribute to our understanding of the motivational and social-cognitive processes underlying victim sensitivity. Using diverse experimental and social contexts, I was able to test theoretical assumptions pertaining to the psychological processes that drive the behavioural tendencies of victim-sensitive people, and I exposed methodological challenges that come with this research. From a practical perspective, this dissertation provides novel insights into the relevance of victim sensitivity in explaining political thought and action. Additional basic and applied research is needed to advance our understanding of the psychological processes underpinning victim sensitivity, and to develop

possibilities for practical interventions. With the present research program, I hope to offer useful insights for both endeavours.

11. Deutsche Zusammenfassung (German Summary)

Moral und Gerechtigkeit sind allgegenwärtige Begriffe in der politischen Arena. Politikerinnen und Politiker streiten über die „moralisch richtige“ Vorgehensweise, Verfassungen enthalten eine Vielzahl von Gerechtigkeitsprinzipien und Bürgerinnen und Bürger wählen Parteien, die unterschiedliche Bilder einer "moralischen" und "gerechten" Gesellschaft zeichnen. Zahlreiche Forschungsarbeiten haben untersucht, wie die Wahrnehmung von Moral und Gerechtigkeit mit politischen Einstellungen und Verhaltensweisen zusammenhängt. Forschungen auf dem Gebiet der Moralpsychologie haben ergeben, dass die Priorisierung bestimmter moralischer Prinzipien oder "Moralische Grundlagen" (englisch: „moral foundations“) mit der politischen Orientierung zusammenhängt. Zu diesen Grundlagen gehören die Domänen Fairness, Fürsorge, Loyalität, Autorität und Religiosität/Heiligkeit (Graham et al., 2009). Einerseits wurde gezeigt, dass die Fürsorge für Bedürftige sowie Fairness, inklusive Gleichheitsgrundsätze in Bezug auf Ressourcenverteilungen, mit einer liberalen und linken politischen Orientierung zusammenhängen (z. B. Graham et al., 2009; Rasinski, 1987). Konservatismus hingegen wurde mit gruppeninternen Normen hinsichtlich Loyalität, Autorität und Religiosität/Heiligkeit sowie leistungsbezogenen Vorstellungen über die Verteilung von Ressourcen in Verbindung gebracht (z. B. Graham et al., 2009; Mitchell et al., 1993; Napier & Jost, 2008).

Während zahlreiche Forschungsarbeiten darauf hindeuten, dass moralische Grundlagen systematisch mit politischen Einstellungen und Verhaltensweisen zusammenhängen (Di Battista et al., 2018; Nilsson et al., 2016; Nilsson & Erlandsson, 2015; Yalçındağ et al., 2019), deuten neuere Ergebnisse darauf hin, dass wir bei der Untersuchung

des Zusammenhangs zwischen moralischem Urteilen und politischem Denken und Handeln die (wahrgenommene) Perspektive der Menschen berücksichtigen müssen (e.g., Rothmund et al., 2020). Forschung zu Gerechtigkeitssensibilität (JS; Schmitt et al., 2005, 2010) zeigt, dass die Sensibilität der Menschen gegenüber Verletzungen moralischer Normen von der Perspektive abhängt, aus der die Verletzung wahrgenommen wird. Diesem Ansatz zufolge unterscheiden sich Menschen in ihrer dispositionellen Sensibilität für die Wahrnehmung von Themen wie Einwanderung oder Klimawandel als Angelegenheiten der Ungerechtigkeit, die sie selbst oder andere betreffen. Es zeigt sich, dass diese perspektivenspezifische Sensibilität für moralische Verstöße mit politischen Einstellungen und Verhaltensweisen zusammenhängt. So haben Studien gezeigt, dass Menschen, die besonders sensibel dafür sind, andere als Opfer von Ungerechtigkeiten wahrzunehmen, linke politische Akteure bevorzugen, eine positive Einstellung gegenüber Einwanderinnen und Einwanderern haben und sich umweltfreundlich verhalten (Nicolai et al., 2022; Rothmund et al., 2020; Süßenbach & Gollwitzer, 2015). Umgekehrt bevorzugen Personen, die besonders empfindlich darauf reagieren, sich als Opfer von Ungerechtigkeit zu sehen (Personen mit erhöhter „Opfersensibilität“), rechtsgerichtete politische Akteure, zeigen antisoziale Tendenzen gegenüber Einwanderinnen und Einwanderern und sind weniger geneigt, sich umweltfreundlich zu verhalten (Nicolai et al., 2022; Rothmund et al., 2020; Süßenbach & Gollwitzer, 2015). Das zentrale Ziel dieser Dissertation ist es, die Zusammenhänge zwischen Opfersensibilität und politischen Einstellungen und Verhaltensweisen sowie die motivationalen und sozial-kognitiven Prozesse, die diese Zusammenhänge erklären, zu untersuchen.

Ungerechtigkeitssensibilität ist eine Persönlichkeitseigenschaft, die die dispositionelle Bereitschaft, Ungerechtigkeiten wahrzunehmen und auf diese zu reagieren beschreibt. Ungerechtigkeitssensible Personen sind besonders empfänglich für Hinweisreize, die auf mögliche Ungerechtigkeiten hindeuten, weshalb sie Verletzungen von Gerechtigkeitsnormen häufiger erleben als Personen, die weniger ungerechtigkeitssensibel sind (Schmitt, 1996).

Ungerechtigkeiten können aus verschiedenen Perspektiven betrachtet werden, und die Forschung zeigt, dass die Wahrnehmung von und die Reaktionen auf Normverletzungen unterschiedlich ausfallen, je nachdem, aus welcher Perspektive das Ereignis betrachtet wird (Mikula, 1994; Mummendey et al., 1984). Während beispielsweise die Wahrnehmung, Opfer einer Ungerechtigkeit geworden zu sein, typischerweise ein Gefühl der Wut auslöst, kann die Beobachtung einer Ungerechtigkeit als Zuschauer moralische Empörung auslösen, und für Ungerechtigkeit verantwortlich zu sein oder davon zu profitieren, kann zu Schuld- und Schamgefühlen führen (Weiss et al., 1999). Auf der Grundlage dieser qualitativen Unterschiede wurde angenommen, dass sich Menschen in ihrer Sensibilität für Ungerechtigkeit zum eigenen Nachteil (Opfersensibilität), für Ungerechtigkeit, die man selber verantwortet (Tätersensibilität), für Ungerechtigkeit, von der man passiv profitiert (Nutznießersensibilität), oder für Ungerechtigkeit, die man als neutraler Beobachter miterlebt (Beobachtersensibilität) unterscheiden (Schmitt et al., 2005).

Opfersensibilität (OS) beinhaltet verschiedene motivationale Tendenzen. Zum einen streben opfersensible Personen nach Gerechtigkeit. Zum anderen hegen opfersensible Personen eine überhöhte Aversion vor ungerechter Behandlung, sodass ihre Handlungen oft durch Selbstschutz motiviert werden. Dies führt zu antisozialen Tendenzen in Situationen, die mit sozialer Unsicherheit und der Gefahr, ausgebeutet zu werden, verbunden sind (Gollwitzer et al., 2005). Das „Sensitivity to Mean Intentions Model“ (SeMI-Modell; Gollwitzer et al., 2013; Gollwitzer & Rothmund, 2009) beschreibt die motivationalen und sozial-kognitiven Prozesse, die der Opfersensibilität zugrunde liegen. Nach dem SeMI-Modell haben opfersensible Personen eine latente Angst davor, ausgebeutet zu werden, weshalb sie Hinweise, die auf eine geringere Vertrauenswürdigkeit hindeuten, höher priorisieren als solche Hinweise, die auf Vertrauenswürdigkeit hindeuten. Opfersensible Menschen sind weniger geneigt, in sozialen Austauschsituationen, wie z. B. sozialen Dilemmas, zu kooperieren, wenn Hinweise auf Unzuverlässigkeit vorhanden sind (Gollwitzer et al., 2013).

Personen mit hohen OS-Werten betrachten Kooperation und Investitionen im öffentlichen Interesse als Verschwendung eigener Ressourcen, da sie erwarten, dass andere nicht kooperieren werden, und somit wäre das Handeln im Interesse der Allgemeinheit eine unnötige Subvention für "Trittbrettfahrer".

Forschungsarbeiten haben damit begonnen, den Zusammenhang zwischen OS und politischen Einstellungen und Verhalten zu untersuchen. Studien deuten darauf hin, dass opfersensible Personen rechtsgerichtete politische Akteure bevorzugen (Jahnke et al., 2020; Rothmund et al., 2020). Eine konservative politische Orientierung in westlichen Ländern betont typischerweise die Sicherheit und das Wohlergehen der eigenen Gruppe, was durch eine zugrundeliegende Angst vor sozialen Gefahren beeinflusst wird (Graham et al., 2009; van Leeuwen & Park, 2009). Da Menschen mit hohen OS-Werten soziale Unsicherheit und bedrohliche Signale besonders scheuen, kommt ihnen eine sicherheitsorientierte politische Orientierung entgegen. So wurde in einer Studie festgestellt, dass der positive Zusammenhang zwischen OS und einer Präferenz für rechtsgerichtete politische Akteure teilweise durch die Sorge um die soziale Ordnung vermittelt wird ("rechtsgerichteter Autoritarismus"; Rothmund et al., 2020). Im Einklang mit dem SeMI-Modell hat sich gezeigt, dass opfersensible Personen in verschiedenen politischen Kontexten auf Ungerechtigkeitshinweise achten, was in der Folge zu antisozialen Gefühlen und Einstellungen gegenüber anderen Gruppen führt. Im Kontext der europäischen Schuldenkrise zeigten beispielsweise Personen mit einem hohen OS-Wert weniger Solidarität mit wirtschaftlich angeschlagenen Ländern als Personen mit einem niedrigen OS-Wert. Außerdem zeigte eine Studie zum Thema Einwanderung, dass vor allem opfersensible Personen wütend auf Einwanderinnen und Einwanderer reagieren, wenn Hinweisreize suggerieren, dass sie ausbeuterische Motive hegen könnten.

Zusammenfassend lässt sich sagen, dass die Forschung darauf hindeutet, dass Opfersensibilität systematisch mit politischen Einstellungen und Verhalten zusammenhängt. Empirische Studien haben begonnen, diese Zusammenhänge zu untersuchen, indem sie

theoretische Annahmen aus dem SeMI-Modell testen. Die Befunde zeigen Forschungslücken auf, die ich in dieser Dissertation behandle: Erstens wurde der Zusammenhang zwischen OS und politischem Konservatismus und antisozialen Einstellungen mit der Sorge, Opfer von Verletzungen moralischer Normen zu werden, in Verbindung gebracht (Rothmund et al., 2020). Wir wissen jedoch, dass Menschen sich um eine Vielzahl moralischer Normen sorgen, die systematisch mit politischen Orientierungen und Einstellungen verbunden sind (Di Battista et al., 2018; Graham et al., 2009). Um zu untersuchen, ob und wie eine Sensibilität dafür, sich als Opfer moralischer Übertretungen zu sehen, mit politischer Orientierung und antisozialen Einstellungen zusammenhängt, sollte man die Vielfalt moralischer Bedenken der Menschen berücksichtigen, einschließlich Bedenken in Bezug auf Fairness, Fürsorge, Autorität, Loyalität und Religiosität/Heiligkeit (Graham et al., 2009). Zweitens hat die Forschung begonnen, die Beziehung zwischen OS und gruppenbezogenen Einstellungen zu untersuchen (Rothmund et al., 2017, 2020). Im Kontext „Zuwanderung“ deuten erste Ergebnisse darauf hin, dass opfersensible Personen antisoziale Tendenzen gegenüber potenziell ausbeuterischen Einwanderinnen und Einwanderern zeigen (e.g., Rothmund et al., 2017; Süßenbach & Gollwitzer, 2015). Jedoch fehlt es an empirischen Erkenntnissen über den kausalen Zusammenhang zwischen OS und Antimigrationseinstellung, den zugrundeliegenden psychologischen Mechanismen und Konsequenzen für das Verhalten gegenüber Einwanderinnen und Einwanderern. Drittens gibt es nur wenige Forschungsarbeiten, die die Beziehung zwischen OS und kollektivem Handeln untersuchen. Erste Ergebnisse deuten darauf hin, dass OS kollektives politisches Engagement entweder behindern oder fördern kann (Rothmund et al., 2014; Traut-Mattausch et al., 2011), allerdings wurden theoretische Erklärungen für diese Ergebnisse nicht empirisch überprüft.

Die vorliegende Dissertation befasst sich mit den obengenannten Forschungslücken. Mit dem ersten Forschungsprojekt verfolgte ich zwei Ziele: Zum einen untersuchte ich, ob sich Menschen in ihrer Sensibilität, sich selbst (oder andere) als Opfer moralischer

Übertretungen wahrzunehmen, in Bezug auf verschiedene moralische Anliegen unterscheiden. Dazu habe ich ein Instrument entwickelt, das die Sensibilität von Personen für moralische Übertretungen in Bezug auf Fairness, Fürsorge, Loyalität, Autorität und Religiosität/Heiligkeit aus vier Perspektiven erfasst: aus der Perspektive des Opfers, des Beobachters, des Nutznießers und des Täters. Frühere Forschungsarbeiten zeigten, dass OS mit einer konservativen (rechten) politischen Orientierung und antisozialen Einstellungen gegenüber anderen Gruppen zusammenhängt (Rothmund et al., 2020), was die theoretische Annahme bestätigt, dass opfersensible Personen selbstbezogene Anliegen priorisieren und antisoziale Kognitionen hegen (Gollwitzer et al., 2009, 2013). Darauf aufbauend untersuchte ich, ob eine Sensibilität dafür, sich als Opfer verschiedener moralischer Übertretungen wahrzunehmen, mit einer konservativen politischen Orientierung und einer einwanderungsfeindlichen Einstellung verbunden ist.

Die Ergebnisse deuten darauf hin, dass opfersensible Personen befürchten, durch moralische Übertretungen im Allgemeinen zum Opfer zu werden, was sich in einer politischen Orientierung und politischen Einstellung niederschlägt, die den Selbst- und Eigengruppenschutz betont (Rothmund et al., 2020; van Leeuwen & Park, 2009). Außerdem suggerieren die Ergebnisse, dass insbesondere eine gruppeninterne Sensibilität für Viktimisierung mit einer rechtsgerichteten Orientierung und einer einwanderungsfeindlichen Einstellung zusammenhängt. Neuere Theorien legen nahe, dass sich OS auf die Gruppenebene "verlagert", wenn sich Individuen mit ihrer Gruppe identifizieren (Baumert et al., 2022). Die aktuellen Befunde könnten ein Hinweis darauf sein, dass OS insbesondere bei Personen, die sich mit ihrer Eigengruppe identifizieren (d.h., die sich Sorgen über Normverletzungen in der Eigengruppe machen), mit einer eigengruppenorientierten politischen Orientierung (Konservatismus) und antisozialen Einstellungen verbunden ist.

Im zweiten Forschungsprojekt untersuchte ich die Beziehung zwischen OS und Antimigrationseinstellungen- und -verhalten. Frühere Ergebnisse deuten darauf hin, dass OS

positiv mit Antimigrationseinstellungen korreliert ist (Rothmund et al., 2020), und eine Studie zeigte, dass kontextuelle Hinweise, die ausbeuterische Absichten vermuten lassen, bei opfersensiblen Personen negative Gefühle gegenüber Einwanderinnen und Einwanderern hervorrufen (Süssenbach & Gollwitzer, 2015, Studie 2). Es ist jedoch unklar, ob OS kausal Antimigrationseinstellungen vorhersagt, welcher psychologische Prozess den Effekt von OS auf Antimigrationseinstellungen antreibt und ob dieser Effekt zu antisozialem Verhalten gegenüber Einwanderinnen und Einwanderern führt. Basierend auf ersten empirischen Erkenntnissen sowie theoretischen Überlegungen, die im SeMI-Modell (Gollwitzer et al., 2013) ausformuliert wurden, testete ich (a) den kausalen Effekt von OS auf Antimigrationseinstellungen, (b) ob eine erhöhte Angst vor Ausbeutung den Effekt von OS auf Antimigrationseinstellungen antreibt und (c) ob dieser Effekt zu antisozialem Verhalten gegenüber Einwanderern führt.

Zusammengenommen deuten drei Studien darauf hin, dass OS erhöhte Antimigrationseinstellungen vorhersagt, wenn Hinweise auf Ausbeutung vorhanden sind, und dass dieser Effekt zu antisozialem Verhalten gegenüber Einwanderinnen und Einwanderern führt. Die Ergebnisse zeigten, dass dieser Effekt nicht "ausgeschaltet" werden konnte, in dem die Angst vor Ausbeutung reduziert wurde. Ein theoretischer Grund für diesen Befund könnte sein, dass der Effekt von OS auf Antimigrationseinstellungen von anderen Variablen als der Angst vor Ausbeutung getrieben wird (z.B. von der Aversion vor sozialer Unsicherheit). Ein methodischer Grund könnte sein, dass die Manipulationen nicht stark genug waren, um der Angst vor Ausbeutung entgegenzuwirken.

Im dritten Forschungsprojekt untersuchte ich die Beziehung zwischen OS und umweltorientiertem kollektivem Verhalten (i.e., „Umweltengagement“). Basierend auf der Idee, dass opfersensible Personen besonders wachsam gegenüber persönlichen Verlusten und Nachteilen sind, eine Tendenz, die positiv mit proaktivem Engagement im politischen Kontext zusammenhängt (Traut-Mattausch et al., 2011), sagte ich voraus, dass opfersensible

Personen ein erhöhtes Engagement zur Abschwächung der Folgen des Klimawandels zeigen werden, wenn diese Folgen als direkt relevant für sie selbst wahrgenommen werden (im Gegensatz zu einem Umstand in dem die Klimafolgen als nicht relevant für sie selbst wahrgenommen werden) – diesen psychologischen Prozess nenne ich „aktiver Schutzpfad“. Basierend auf der Annahme, dass kollektives Engagement als ein soziales Dilemma-Szenario angesehen werden kann (Irwin & Simpson, 2013), das bei opfersensiblen Personen nachweislich Angst vor Ausbeutung und in der Folge antisoziales Verhalten auslöst (Gollwitzer et al., 2009), habe ich vorhergesagt, dass opfersensible Personen ein geringeres Engagement für die Umwelt zeigen, wenn Hinweisreize darauf hindeuten, dass andere ihr politisches Engagement ausnutzen könnten – diesen psychologischen Prozess nenne ich „passiver Schutzpfad.“

Zusammenfassend lässt sich sagen, dass die durchgeführten Studien keine empirischen Beweise für den "aktiven Schutzpfad" liefern, demzufolge Personen mit einer hohen OS ein erhöhtes Umweltengagement zeigen, wenn sie sich persönlich durch die Folgen des Klimawandels benachteiligt fühlen. Die Studien liefern teilweise empirische Beweise für den "passiven Schutzpfad", demzufolge opfersensible Personen ein geringeres Umweltengagement zeigen, weil sie eine erhöhte Angst haben, von "Sozialschmarotzern" ausgenutzt zu werden. Der Versuch, den angenommenen psychologischen Mechanismus (Angst vor Ausbeutung) „auszuschalten,“ war erfolglos. Eine Erklärung hierfür könnte sein, dass die Manipulation nicht ausreichte, um opfersensiblen Personen die Angst vor Ausbeutung zu nehmen. Ein Manipulationscheck unterstütze diese Vermutung empirisch.

Die in dieser Dissertation inkludierten Forschungsprojekte tragen zu unserem Verständnis der Zusammenhänge zwischen Opfersensibilität und politischen Einstellungen und Verhalten sowie der psychologischen Prozesse, die diese Zusammenhänge erklären, bei. Im Rahmen dieser Dissertation konnte ich zeigen, dass OS selbstschützende Tendenzen beinhaltet, die sich in robusten antisozialen politischen Einstellungen und Verhaltensweisen

niederschlagen. Aus theoretischer Sicht tragen diese Erkenntnisse zu unserem Verständnis der motivationalen und sozial-kognitiven Prozesse bei, die der Opfersensibilität zugrunde liegen. Unter Verwendung verschiedener experimenteller und sozialer Kontexte konnte ich theoretische Annahmen zu den psychologischen Prozessen testen, die die Verhaltenstendenzen von opfersensiblen Menschen erklären. Außerdem konnte ich methodologische Herausforderungen aufzeigen, die mit dieser Forschung einhergehen. Aus praktischer Sicht zeigen diese empirischen Erkenntnisse, dass individuelle Unterschiede eine entscheidende Rolle im politischen Denken und Handeln spielen. Weitere Grundlagen- und angewandte Forschung ist notwendig, um unser Verständnis der psychologischen Prozesse, die der Opfersensibilität zugrunde liegen, zu verbessern und ggfs. Möglichkeiten für praktische Interventionen zu entwickeln. Mit der vorliegenden Dissertation hoffe ich, nützliche Erkenntnisse für beide Bemühungen zu liefern.

12. References²⁵

- Agroskin, D., Jonas, E., & Traut-Mattausch, E. (2015). When suspicious minds go political: distrusting and justifying the system at the same time. *Political Psychology, 36*(6), 613–629. <https://doi.org/10.1111/pops.12185>
- Aquino, K., & Reed II, A. (2002). The self-importance of moral identity. *Journal of Personality and Social Psychology, 83*(6), 1423–1440. <https://doi.org/10.1037/0022-3514.83.6.1423>
- Atari, M., Graham, J., & Dehghani, M. (2020). Foundations of morality in Iran. *Evolution and Human Behavior, 41*(5), 367–384. <https://doi.org/10.1016/j.evolhumbehav.2020.07.014>
- Baldner, C. (2018). Morality and environment: Analyzing the effect of the moral foundations on attitudes towards the environment in Italy. *Rassegna Di Psicologia, 35*(1), 67-77, Article 1. <https://doi.org/10.13133/1974-4854/16686>
- Baumert, A., Adra, A., & Li, M. (2022). Justice sensitivity in intergroup contexts: A theoretical framework. *Social Justice Research, 35*(1), 7–32. <https://doi.org/10.1007/s11211-021-00378-9>
- Baumert, A., Beierlein, C., Schmitt, M., Kemper, C. J., Kovaleva, A., Liebig, S., & Rammstedt, B. (2014). Measuring four perspectives of justice sensitivity with two items each. *Journal of Personality Assessment, 96*(3), 380–390. <https://doi.org/10.1080/00223891.2013.836526>
- Blais, A., & St-Vincent, S. L. (2011). Personality traits, political attitudes and the propensity to vote. *European Journal of Political Research, 50*(3), 395–417. <https://doi.org/10.1111/j.1475-6765.2010.01935.x>

²⁵ This reference list includes references for the following chapters: “Theoretical Background and Introduction,” “Final Discussion,” and “Deutsche Zusammenfassung (German Summary).” References for the manuscripts can be found in the respective chapters.

- Block, J., & Block, J. H. (2006). Nursery school personality and political orientation two decades later. *Journal of Research in Personality, 40*(5), 734–749.
<https://doi.org/10.1016/j.jrp.2005.09.005>
- Brandt, M. J., & Wagemans, F. M. A. (2017). From the political here and now to generalizable knowledge. *Translational Issues in Psychological Science, 3*(3), 317–320. <https://doi.org/10.1037/tps0000126>
- Buchholz, M., Gollwitzer, M., Magraw-Mickelson, Z., Stolz, C., & Süssenbach, P. (2023). Taking back control: Findings on the cognitive, behavioral, and motivational consequences of victim sensitivity. *Social Justice Research, 36*(2), 133–159.
<https://doi.org/10.1007/s11211-023-00407-9>
- Burghardt, D. (2022). *Opferfantasien Zur Kritik des Antisemitismus in der Querdenken-Bewegung*. <https://doi.org/10.17883/3690>
- Carney, D. R., Jost, J. T., Gosling, S. D., & Potter, J. (2008). The secret lives of liberals and conservatives: Personality profiles, interaction styles, and the things they leave behind. *Political Psychology, 29*(6), 807–840. <https://doi.org/10.1111/j.1467-9221.2008.00668.x>
- Carroll, A. (2009). Are you looking at me? Understanding and managing paranoid personality disorder. *Advances in Psychiatric Treatment, 15*(1), 40–48.
<https://doi.org/10.1192/apt.bp.107.005421>
- Di Battista, S., Pivetti, M., & Berti, C. (2018). Moral foundations, political orientation and religiosity in Italy. *The Open Psychology Journal, 11*(1), 46–58.
<https://doi.org/10.2174/1874350101811010046>
- Eaves, L. J., & Hatemi, P. K. (2008). Transmission of attitudes toward abortion and gay rights: Effects of genes, social learning and mate selection. *Behavior Genetics, 38*(3), 247–256. <https://doi.org/10.1007/s10519-008-9205-4>

- Eriksen, S., Schipper, E. L. F., Scoville-Simonds, M., Vincent, K., Adam, H. N., Brooks, N., Harding, B., Khatri, D., Lenaerts, L., Liverman, D., Mills-Novoa, M., Mosberg, M., Movik, S., Muok, B., Nightingale, A., Ojha, H., Sygna, L., Taylor, M., Vogel, C., & West, J. J. (2021). Adaptation interventions and their effect on vulnerability in developing countries: Help, hindrance or irrelevance? *World Development*, *141*, 105383. <https://doi.org/10.1016/j.worlddev.2020.105383>
- Faist, T. (2012). Toward a transnational methodology: Methods to address methodological nationalism, essentialism, and positionality. *Revue européenne des migrations internationales*, *28*(1), 51–70. <https://doi.org/10.4000/remi.5761>
- FeldmanHall, O., & Shenhav, A. (2019). Resolving uncertainty in a social world. *Nature Human Behaviour*, *3*(5), Article 5, 426–435. <https://doi.org/10.1038/s41562-019-0590-x>
- Furlong, C., & Vignoles, V. L. (2021). Social identification in collective climate activism: Predicting participation in the environmental movement, Extinction Rebellion. *Identity*, *21*(1), 20–35. <https://doi.org/10.1080/15283488.2020.1856664>
- Gerlach, T. M., Allemand, M., Agroskin, D., & Denissen, J. J. A. (2012). Justice sensitivity and forgiveness in close interpersonal relationships: The mediating role of mistrustful, legitimizing, and pro-relationship cognitions. *Journal of Personality*, *80*(5), 1373–1413. <https://doi.org/10.1111/j.1467-6494.2012.00762.x>
- Gollwitzer, M., Magraw-Mickelson, Z., Vollan, B., & Süßenbach, P. (2021). Victim sensitivity in groups: When is one a detriment to all? *Journal of Theoretical Social Psychology*, *5*(1), 3–13. <https://doi.org/10.1002/jts5.76>
- Gollwitzer, M., & Rothmund, T. (2009). When the need to trust results in unethical behavior: The sensitivity to mean intentions (SeMI) model. In *Psychological perspectives on ethical behavior and decision making* (pp. 135–152). Information Age Publishing, Inc.

- Gollwitzer, M., Rothmund, T., Alt, B., & Jekel, M. (2012). Victim sensitivity and the accuracy of social judgments. *Personality and Social Psychology Bulletin*, 38(8), 975–984. <https://doi.org/10.1177/0146167212440887>
- Gollwitzer, M., Rothmund, T., Pfeiffer, A., & Ensenbach, C. (2009). Why and when justice sensitivity leads to pro- and antisocial behavior. *Journal of Research in Personality*, 43(6), 999–1005. <https://doi.org/10.1016/j.jrp.2009.07.003>
- Gollwitzer, M., Rothmund, T., & Süßenbach, P. (2013). The Sensitivity to Mean Intentions (SeMI) Model: Basic assumptions, recent findings, and potential avenues for future research. *Social and Personality Psychology Compass*, 7(7), 415–426. <https://doi.org/10.1111/spc3.12041>
- Gollwitzer, M., Schmitt, M., Schalke, R., Maes, J., & Baer, A. (2005). Asymmetrical effects of justice sensitivity perspectives on prosocial and antisocial behavior. *Social Justice Research*, 18(2), 183–201. <https://doi.org/10.1007/s11211-005-7368-1>
- Gollwitzer, M., Süßenbach, P., & Hannuschke, M. (2015). Victimization experiences and the stabilization of victim sensitivity. *Frontiers in Psychology*, 6. <https://doi.org/10.3389/fpsyg.2015.00439>
- Graham, J., Haidt, J., Koleva, S., Motyl, M., Iyer, R., Wojcik, S. P., & Ditto, P. H. (2013). Chapter two - Moral Foundations Theory: The pragmatic validity of moral pluralism. In P. Devine & A. Plant (Eds.), *Advances in Experimental Social Psychology* (Vol. 47, pp. 55–130). Academic Press. <https://doi.org/10.1016/B978-0-12-407236-7.00002-4>
- Graham, J., Haidt, J., & Nosek, B. A. (2009). Liberals and conservatives rely on different sets of moral foundations. *Journal of Personality and Social Psychology*, 96(5), 1029–1046. <https://doi.org/10.1037/a0015141>
- Graham, J., Nosek, B. A., Haidt, J., Iyer, R., Spassena, K., & Ditto, P. H. (2011). *Moral Foundations Questionnaire* [dataset]. <https://doi.org/10.1037/t05651-000>

- Haidt, J. (2012). *The Righteous Mind: Why Good People Are Divided by Politics and Religion*. Knopf Doubleday Publishing Group.
- Haidt, J., & Joseph, C. (2011). How Moral Foundations Theory succeeded in building on sand: A response to Suhler and Churchland. *Journal of Cognitive Neuroscience*, *23*(9), 2117–2122. <https://doi.org/10.1162/jocn.2011.21638>
- Heckathorn, D. D. (1996). The dynamics and dilemmas of collective action. *American Sociological Review*, *61*(2), 250–277. <https://doi.org/10.2307/2096334>
- Henrich, J., Heine, S. J., & Norenzayan, A. (2010). Most people are not WEIRD. *Nature*, *466*(7302), Article 7302. <https://doi.org/10.1038/466029a>
- Irwin, K., & Simpson, B. (2013). Do descriptive norms solve social dilemmas? Conformity and contributions in collective action groups. *Social Forces*, *91*(3), 1057–1084. <https://doi.org/10.1093/sf/sos196>
- Iyer, R., Koleva, S., Graham, J., Ditto, P., & Haidt, J. (2012). Understanding libertarian morality: The psychological dispositions of self-identified libertarians. *PLOS ONE*, *7*(8), e42366. <https://doi.org/10.1371/journal.pone.0042366>
- Jacoby, J., & Sassenberg, K. (2011). Interactions do not only tell us when, but can also tell us how: Testing process hypotheses by interaction. *European Journal of Social Psychology*, *41*(2), 180–190. <https://doi.org/10.1002/ejsp.762>
- Jahnke, S., Schröder, C. P., Goede, L.-R., Lehmann, L., Hauff, L., & Beelmann, A. (2020). Observer sensitivity and early radicalization to violence among young people in Germany. *Social Justice Research*, *308–330*. <https://doi.org/10.1007/s11211-020-00351-y>
- Jansson, J., & Dorrepaal, E. (2015). Personal norms for dealing with climate change: Results from a survey using Moral Foundations Theory. *Sustainable Development*, *23*(6), 381–395. <https://doi.org/10.1002/sd.1598>

- Jetten, J., Mols, F., & Postmes, T. (2015). Relative deprivation and relative wealth enhances anti-immigrant sentiments: The V-Curve re-examined. *PLOS ONE*, *10*(10), e0139156. <https://doi.org/10.1371/journal.pone.0139156>
- Jetten, J., Mols, F., & Selvanathan, H. P. (2020). How economic inequality fuels the rise and persistence of the yellow vest movement. *International Review of Social Psychology*, *33*. <https://doi.org/10.5334/irsp.356>
- Kay, A., Gaucher, D., Napier, J., Callan, M., & Laurin, K. (2008). God and the government: Testing a compensatory control mechanism for the support of external systems. *Journal of Personality and Social Psychology*, *95*, 18–35. <https://doi.org/10.1037/0022-3514.95.1.18>
- Kivikangas, J. M., Fernández-Castilla, B., Järvelä, S., Ravaja, N., & Lönnqvist, J.-E. (2021). Moral foundations and political orientation: Systematic review and meta-analysis. *Psychological Bulletin*, *147*(1), 55–94. <https://doi.org/10.1037/bul0000308>
- Kramer, R. M. (1998). Paranoid cognition in social systems: Thinking and acting in the shadow of doubt. *Personality and Social Psychology Review*, *2*(4), 251–275. https://doi.org/10.1207/s15327957pspr0204_3
- Lasswell, H. D. (1950). *Politics: Who Gets What, When, How*. Pickle Partners Publishing.
- Lerner, M. J. (1975). The justice motive in social behavior: Introduction. *Journal of Social Issues*, *31*(3), 1–19. <https://doi.org/10.1111/j.1540-4560.1975.tb00995.x>
- Lerner, M. J. (1977). The justice motive: Some hypotheses as to its origins and forms. *Journal of Personality*, *45*(1), 1–52. <https://doi.org/10.1111/j.1467-6494.1977.tb00591.x>
- Lewis, K. C., & Ridenour, J. M. (2020). Paranoid personality disorder. In V. Zeigler-Hill & T. K. Shackelford (Eds.), *Encyclopedia of Personality and Individual Differences* (pp. 3413–3421). Springer International Publishing. https://doi.org/10.1007/978-3-319-24612-3_615

- Lotz, S., Baumert, A., Schlösser, T., Gresser, F., & Fetchenhauer, D. (2011). Individual differences in third-party interventions: How justice sensitivity shapes altruistic punishment. *Negotiation and Conflict Management Research*, 4(4), 297–313. <https://doi.org/10.1111/j.1750-4716.2011.00084.x>
- Macdougall, A. I., van der Veen, J., Feddes, A. R., Nickolson, L., & Doosje, B. (2018). Different strokes for different folks: The role of psychological needs and other risk factors in early radicalisation. *International Journal of Developmental Science*, 12(1–2), 37–50. <https://doi.org/10.3233/DEV-170232>
- Mau, S. (2004). Welfare regimes and the norms of social exchange. *Current Sociology*, 52(1), 53–74. <https://doi.org/10.1177/0011392104039314>
- Mikula, G. (1994). Perspective-related differences in interpretations of injustice by victims and victimizers. In M. J. Lerner & G. Mikula (Eds.), *Entitlement and the Affectional Bond: Justice in Close Relationships* (pp. 175–203). Springer US. https://doi.org/10.1007/978-1-4899-0984-8_8
- Mummendey, A., Linneweber, V., & Löschper, G. (1984). Actor or victim of aggression: Divergent perspectives—divergent evaluations. *European Journal of Social Psychology*, 14(3), 297–311. <https://doi.org/10.1002/ejsp.2420140305>
- Nelson, J. K., Hynes, M., Sharpe, S., Paradies, Y., & Dunn, K. (2018). Witnessing anti-white ‘racism’: White victimhood and ‘reverse racism’ in Australia. *Journal of Intercultural Studies*, 39(3), 339–358. <https://doi.org/10.1080/07256868.2018.1459516>
- Nicolai, S., Franikowski, P., & Stoll-Kleemann, S. (2022). Predicting pro-environmental intention and behavior based on justice sensitivity, moral disengagement, and moral emotions – Results of two quota-sampling surveys. *Frontiers in Psychology*, 13. <https://www.frontiersin.org/articles/10.3389/fpsyg.2022.914366>

- Nilsson, A., & Erlandsson, A. (2015). The Moral Foundations taxonomy: Structural validity and relation to political ideology in Sweden. *Personality and Individual Differences*, 76, 28–32. <https://doi.org/10.1016/j.paid.2014.11.049>
- Nilsson, A., Erlandsson, A., & Västfjäll, D. (2016). The congruency between moral foundations and intentions to donate, self-reported donations, and actual donations to charity. *Journal of Research in Personality*, 65, 22–29. <https://doi.org/10.1016/j.jrp.2016.07.001>
- Noor, M., Vollhardt, J. R., Mari, S., & Nadler, A. (2017). The social psychology of collective victimhood. *European Journal of Social Psychology*, 47(2), 121–134. <https://doi.org/10.1002/ejsp.2300>
- Prattes, V. (2023). „Inzidenz bei 1933“: Visuelle Inszenierungs- und Emotionalisierungsstrategien des Opfer- und Widerstandsmythos in der „Querdenken-Bewegung“. *Zeitschrift für Kultur- und Kollektivwissenschaft*, 9(1), 155–198. <https://doi.org/10.14361/zkkw-2023-090108>
- Rothmund, T., Baumert, A., & Zinkernagel, A. (2014). The German “Wutbürger”: How justice sensitivity accounts for individual differences in political engagement. *Social Justice Research*, 27(1), 24–44. <https://doi.org/10.1007/s11211-014-0202-x>
- Rothmund, T., Bromme, L., & Azevedo, F. (2020). Justice for the people? How justice sensitivity can foster and impair support for populist radical-right parties and politicians in the United States and in Germany. *Political Psychology*, 41(3), 479–497. <https://doi.org/10.1111/pops.12632>
- Rothmund, T., Gollwitzer, M., & Klimmt, C. (2011). Of virtual victims and victimized virtues: Differential effects of experienced aggression in video games on social cooperation. *Personality & Social Psychology Bulletin*, 37(1), 107–119. <https://doi.org/10.1177/0146167210391103>

- Rothmund, T., Stavrova, O., & Schlösser, T. (2017). Justice concerns can feed nationalistic concerns and impede solidarity in the Euro Crisis: How victim sensitivity translates into political attitudes. *Social Justice Research, 30*(1), 48–71.
<https://doi.org/10.1007/s11211-017-0280-7>
- Schein, C., & Gray, K. (2015). The unifying moral dyad: Liberals and conservatives share the same harm-based moral template. *Personality and Social Psychology Bulletin, 41*(8), 1147–1163. <https://doi.org/10.1177/0146167215591501>
- Schein, C., & Gray, K. (2018). The Theory of Dyadic Morality: Reinventing moral judgment by redefining harm. *Personality and Social Psychology Review, 22*(1), 32–70.
<https://doi.org/10.1177/1088868317698288>
- Schmitt, M. (1996). Individual differences in Sensitivity to Befallen Injustice (SBI). *Personality and Individual Differences, 21*(1), 3–20. [https://doi.org/10.1016/0191-8869\(96\)00028-1](https://doi.org/10.1016/0191-8869(96)00028-1)
- Schmitt, M., Baumert, A., Gollwitzer, M., & Maes, J. (2010). The Justice Sensitivity Inventory: Factorial validity, location in the personality facet space, demographic pattern, and normative data. *Social Justice Research, 23*(2), 211–238.
<https://doi.org/10.1007/s11211-010-0115-2>
- Schmitt, M., Gollwitzer, M., Maes, J., & Arbach, D. (2005). Justice sensitivity. *European Journal of Psychological Assessment, 21*(3), 202–211. <https://doi.org/10.1027/1015-5759.21.3.202>
- Schmitt, M. J., Neumann, R., & Montada, L. (1995). Dispositional Sensitivity to Befallen Injustice. *Social Justice Research, 8*(4), 385–407. <https://doi.org/10.1007/BF02334713>
- Süssenbach, P., & Gollwitzer, M. (2015). Us(ed): The role of victim sensitivity in potentially exploitative intergroup relationships. *Group Processes & Intergroup Relations, 18*(2), 241–255. <https://doi.org/10.1177/1368430214556700>

- Süssenbach, P., Gollwitzer, M., Mieth, L., Buchner, A., & Bell, R. (2016). Trustworthy tricksters: Violating a negative social expectation affects source memory and person perception when fear of exploitation is high. *Frontiers in Psychology, 7*.
<https://www.frontiersin.org/articles/10.3389/fpsyg.2016.02037>
- Tajfel, H. (1970). Experiments in intergroup discrimination. *Scientific American, 223*(5), 96–103.
- Tajfel, H., Billig, M. G., Bundy, R. P., & Flament, C. (1971). Social categorization and intergroup behaviour. *European Journal of Social Psychology, 1*(2), 149–178.
<https://doi.org/10.1002/ejsp.2420010202>
- Tham, Y. J., Hashimoto, T., & Karasawa, K. (2019). The positive and negative effects of justice sensitivity and justice-related emotions in the volunteer's dilemma. *Personality and Individual Differences, 151*, 109501. <https://doi.org/10.1016/j.paid.2019.07.011>
- Titlestad, K., Snijders, T. A. B., Durrheim, K., Quayle, M., & Postmes, T. (2019). The dynamic emergence of cooperative norms in a social dilemma. *Journal of Experimental Social Psychology, 84*, 103799.
<https://doi.org/10.1016/j.jesp.2019.03.010>
- Traut-Mattausch, E., Guter, S., Zanna, M. P., Jonas, E., & Frey, D. (2011). When citizens fight back: Justice sensitivity and resistance to political reform. *Social Justice Research, 24*(1), 25–42. <https://doi.org/10.1007/s11211-011-0125-8>
- Vainio, A., & Mäkinen, J.-P. (2016). How are moral foundations associated with climate-friendly consumption? *Journal of Agricultural and Environmental Ethics, 29*(2), 265–283. <https://doi.org/10.1007/s10806-016-9601-3>
- Van Lange, P. A. M., Joireman, J., Parks, C. D., & Van Dijk, E. (2013). The psychology of social dilemmas: A review. *Organizational Behavior and Human Decision Processes, 120*(2), 125–141. <https://doi.org/10.1016/j.obhdp.2012.11.003>

- van Leeuwen, F., & Park, J. H. (2009). Perceptions of social dangers, moral foundations, and political orientation. *Personality and Individual Differences, 47*(3), 169–173.
<https://doi.org/10.1016/j.paid.2009.02.017>
- Vohs, K., Baumeister, R., & Chin, J. (2007). Feeling duped: Emotional, motivational, and cognitive aspects of being exploited by others. *Review of General Psychology, 11*, 127–141. <https://doi.org/10.1037/1089-2680.11.2.127>
- Waytz, A., Iyer, R., Young, L., Haidt, J., & Graham, J. (2019). Ideological differences in the expanse of the moral circle. *Nature Communications, 10*(1), Article 1.
<https://doi.org/10.1038/s41467-019-12227-0>
- Weiss, H. M., Suckow, K., & Cropanzano, R. (1999). Effects of justice conditions on discrete emotions. *Journal of Applied Psychology, 84*(5), 786–794.
<https://doi.org/10.1037/0021-9010.84.5.786>
- Williams, A. M., & Baláž, V. (2012). Migration, risk, and uncertainty: Theoretical perspectives. *Population, Space and Place, 18*(2), 167–180.
<https://doi.org/10.1002/psp.663>
- Yalçındağ, B., Özkan, T., Cesur, S., Yılmaz, O., Tepe, B., Piyale, Z. E., Biten, A. F., & Sunar, D. (2019). An investigation of moral foundations theory in Turkey using different measures. *Current Psychology, 38*(2), 440–457. <https://doi.org/10.1007/s12144-017-9618-4>
- Yamagishi, T. (1986). The provision of a sanctioning system as a public good. *Journal of Personality and Social Psychology, 51*(1), 110–116. <https://doi.org/10.1037/0022-3514.51.1.110>
- Yildiz, A. A., & Verkuyten, M. (2011). Inclusive victimhood: Social identity and the politicization of collective trauma among Turkey's Alevis in western Europe. *Peace and Conflict: Journal of Peace Psychology, 17*(3), 243–269.
<https://doi.org/10.1080/10781919.2011.587175>