Right- and Left-wing Prejudice Toward Dissimilar Groups in Cultural and Economic Domains

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Abstract

According to recent studies, people on both the political right and left show prejudice toward groups whose beliefs are in conflict with their own. This prediction applies both to cultural and economic dimensions of political beliefs. In three studies ($N = 499$) we demonstrate that people on both the cultural and economic right and left show negative attitudes toward groups on the other side of the given spectrum and that underlying this effect is the perception of value violation. In two out of three studies, we manipulated the extremity of target worldviews to further explore the causal chain between political beliefs, the perception of value violation and prejudice. Our results showed high degree of symmetry between the political left and right in their attitudes toward groups with dissimilar beliefs. However, although people on both sides of the political spectrum show prejudice toward each other, people on the cultural and economic right seem to be more sensitive to value violations than people on the left.

Key-words: political beliefs, conservatism, value violation, ideological conflict hypothesis

In this paper we attempt to elaborate on how political beliefs shape attitudes toward those who belong to groups espousing beliefs different from our own as proposed in the *ideological conflict hypothesis* (Brandt, Reyna, Chambers, Crawford, & Wetherell, 2014). Following its predictions, we further postulate that the perception of value violation is the key mechanism underlying prejudice toward groups with dissimilar beliefs (tested in Study 1), and that this mechanism is more important than the mere categorization of someone as a member of such a group (tested in Study 2.1 and Study 2.2). Furthermore, we stress the impact of the cultural and economic dimensions of political beliefs on these attitudes. Importantly, our analyses refer to people on the political right and left, both in terms of our participants and the targets of their assessments. The differentiation between the two strands of political beliefs seems to be crucial in explaining ideology in modern societies (e.g., Feldman & Johnston, 2014). Therefore, we suggest that testing the ideological conflict as a source of prejudice in the context of the two dimensions of political beliefs is important for the theory of prejudice toward *political* outgroups.

Prejudice among the Political Right and Left

An influential approach to understanding the differences between people with right- and left-wing political beliefs is motivated cognition. Its main assumption is that political beliefs satisfy epistemic, existential, and relational motives (Jost, 2006; Jost, Glaser, Kruglanski, & Sulloway, 2003; *cf.* Greenberg & Jonas, 2003). A number of motives were considered to be the source of right-wing beliefs, e.g., intolerance of ambiguity (Frenkel-Brunswick, 1949), the need for cognitive closure (Jost et al., 2003), or system justification (Jost & Banaji, 1994). All of these motivations can on their own, or in interaction with another, contribute to the adoption of right-wing ideology. In this vein, while right-wing beliefs are linked with a tendency toward prejudice and intolerance, left-wing beliefs are portrayed as related to openness and tolerance (Federico & Sidanius, 2002; Sibley & Duckitt, 2008).

The popular view of prejudiced right-wingers and tolerant leftists was recently challenged by the notion that the former are not prejudiced toward just *any* group (Brandt et al., 2014). It was proposed that right-wingers exhibit negative attitudes only toward those groups which hold beliefs that are dissimilar to their own, and that similar phenomena should be observed among left-wingers. Furthermore, Brandt and colleagues (2014) emphasized that previous research on prejudice and political beliefs usually took into considerations target groups with beliefs dissimilar to right-wingers only e.g., African Americans. Oftentimes it made impossible to disentangle the impact of perceived ideology of the group and other factors, like race, on the prejudice. In contrast, Chambers and colleagues (2013, *Study 2* and *Study 3*) manipulated targets' race (European American vs. African American) and targets' political leanings (right- vs left-wing) and showed that the only predictor of attitudes toward targets was their ideological positions, neither race nor the interaction between targets' ideology and race.

Earlier research also supports premises of ideological conflict hypothesis. For example, in their congruency hypothesis, Rokeach and colleagues (Rokeach, 1961; Rokeach & Mezei, 1966; Rokeach, Smith, & Evans, 1960; *cf.* Triandis, 1961) suggested that similarity of beliefs and opinions, not necessarily political in nature, rather than race

is the major component of prejudice. Similarly, an extensive research program on impact of attitude similarity and attraction showed, that people like those who are alike (Byrne, 1997 for overview). Furthermore, previous research also demonstrated that both right- and left-wingers exhibit intolerance toward those with whom they disagree (Lambert & Chasteen, 1997; McGrew, 1969; Yancey, 2010). For example, Lambert and Chasteen (1997) suggested that both older people and African Americans are perceived as welfare recipients (thus perceived as violating right-wing values). In contrast, older adults represent the conventional values but African Americans are perceived as unconventional. Thus, they showed that while left-wing beliefs predicted more positive attitudes toward African Americans and older people, right-wing beliefs were positively related only to perceptions of elderly. Furthermore, McClosky & Chong (1985) noted that although the freedom of speech is important left-wing value, leftists support for civil liberties is selective to those with whom they agree. Finally, other beliefs systems such as religiosity impacts prejudice toward groups and individuals representing dissimilar beliefs (Brandt & Van Tongeren, 2017; Kossowska, Czernatowicz-Kukuczka, & Sekerdej, 2017; Kossowska & Sekerdej, 2015). For example, Yancey (2010) noted that negative attitudes exhibited by religious people toward atheists are stronger than negative sentiment toward religious groups shown by atheists, “the level of animosity toward fundamentalists is not trivial” (p. 159). In similar vein, Kossowska and others (2017) demonstrated that both dogmatic Catholics as well as dogmatic atheists to similar extent show prejudice toward groups with dissimilar beliefs.

Value Violation as a Mechanism of Prejudice

Value violation¹ was repeatedly found to be a mechanism of antipathy toward groups, and one that is not restricted to right-wing oriented people (Cottrell & Neuberg, 2005; Esses, Haddock, & Zanna, 1993; Stephan & Stephan, 2000). Here, we adopt a definition of value violation as the perception of whether a group or individual devalue or disregard person’s important values (e.g., Henry & Reyna, 2007; Kossowska et al., 2017; Wetherell et al., 2013). Thus, value violation should operate as a mechanism of prejudice for people on both the right and the left; when a particular group is perceived as violating their values, people on both sides of the political spectrum exhibit similar levels of prejudice or discriminating behaviors toward such groups (Chambers, Schlenker, & Collisson, 2013; Crawford & Pilanski, 2012; Wetherell et al., 2013). Importantly, groups which espouse beliefs dissimilar to our own, question one’s values and undermine certainty that beliefs systems provide (e.g., Kossowska et al., 2017; Wetherell, Brandt, & Reyna, 2013). Thus, prejudice against such groups is a way to “protect the validity and vitality of people’s belief systems” (Brandt & Van Tongeren, 2017, p. 76).

Furthermore, the mere identification of a person as a member of a social or political group usually entails inferences about his or her ideological positions (e.g., atheists and Catholics are usually perceived as being left- and

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¹ Different theories used different terminology to express the idea of questioning someone’s values such as, e.g., “value violation” (e.g., Sears & Henry, 2003), “symbolic threat” (e.g., Crawford, 2014; Stephan & Stephan, 2000), “symbolic beliefs” (Esses et al, 1993), “threat to group values” (e.g., Cottrell & Neuberg, 2005), “worldview conflict” (e.g., Crawford et al., 2017).

right-wing, respectively; Chambers et al., 2013). Thus, one might expect that an atheist, in light of their opinions and worldviews, would violate values of those on the political right (e.g., Henry & Reyna, 2007; Kossowska et al., 2017). This can also be expected in the opposite direction; one could expect that a Catholic would violate the values of those on the left. As it was shown, the larger the discrepancy between beliefs, the larger self-reported value violation (e.g., Brandt et al., 2014) but also physiologically manifested threat (Kossowska, Szwed, Czernatowicz-Kukuczka, Sekerdej, & Wyczesany, 2017). However, the *default* mode of perceiving those with dissimilar beliefs as value violating may not always occur. We posit that the mere identification of a person as an outgroup member is not sufficient to elicit prejudice if one is provided with information that the target in question does not actually disrespect the perceiver's values. In other words, if a member of political outgroup is moderate in their own opinions and respects the worldviews of the other "side," thus, should not evoke negative attitudes as there is no need to protect one's belief system. For example, if an atheist shows respect for the values of the political right, we believe that right-wingers should show no prejudice against such an atheist. And vice-versa, that is, if a Catholic is open to other people's worldviews, left-wingers will not exhibit prejudice toward that person.

The existing body of research suggests that particular political beliefs predispose people to prejudice toward groups with dissimilar beliefs. However, in most of research conducted within the ideological conflict hypothesis, apart from Crawford and others (2017), political beliefs were measured by means of ideological self-placement (e.g., Chambers et al., 2014; Crawford & Pilanski, 2014; Wetherell et al., 2013) or by only one dimension of political beliefs (e.g., Crawford, 2014). As there is evidence that political beliefs comprise two dimensions, we believe, that the main predictor in the model of attitudes toward groups with beliefs differing from one's own should be examined with greater precision. Thus, we took into account the structural complexity of political beliefs by separately examining the cultural and economic dimensions of political beliefs.

Structural Complexity of Political Beliefs

Most of research in the field treats political beliefs as a unidimensional construct (e.g., Jost, Federico, & Napier, 2009; Thorisdottir, Jost, Liviatan, & Shrout, 2007). However, many authors postulate that political beliefs are comprised of two core dimensions: first, the preference for social change vs. tradition and second, attitudes toward inequalities (Jost et al., 2003; Malka, Soto, Inzlicht, & Leles, 2014). In this vein, Feldman and Johnston (2014) argue that the unidimensional model of political beliefs is not sufficient for the study of political ideology. The authors measured the two dimensions of political beliefs, cultural and economic ones, and subsequently identified six distinct types of political attitudes. Within these six types, only two groups resemble those traditionally conceptualized as right- or left-wing: people high on authoritarianism who advocate for a very liberal, free-market economy and people low on authoritarianism holding leftist economic attitudes, respectively. These two groups made up less than 40% of the sample comprised of adult US citizens.

In the current study, we examine right- and left-wing cultural and economic beliefs. The notion of right-wing culture beliefs refers to a preference for traditional values and norms, while the notion of left-wing cultural beliefs refers to a preference for social change and personal freedom. The idea of right-wing economic beliefs refers to a preference for a free-market economy, the elimination of price control and the opposition to social welfare, while the idea of left-wing economic beliefs refers to a preference for egalitarianism and the welfare state. The cultural and economic dimensions of political beliefs do not always correlate positively with each other: they may not correlate with each other or they may correlate with each other negatively (e.g., Baldassari & Gelman, 2008; Duriez, Van Hiel, & Kossowska, 2005). This means that individuals with similar worldviews on cultural issues can hold differing beliefs on economic issues, and that people with similar economic beliefs can hold differing cultural beliefs. For example, an atheist (usually culturally left-wing) might adopt either right- or left-wing beliefs on the economy.

In this vein, Crawford and colleagues (2017), demonstrated that cultural and economic beliefs differentially predict prejudice toward groups with dissimilar beliefs. They showed that indeed, the two dimensions of political beliefs independently predict attitudes toward groups on the other side of political spectrum (*dimension-specific symmetry hypothesis*). Moreover, the researchers demonstrated evidence that conflict on cultural dimension of political beliefs is more strongly felt than conflict on economic dimension (*social primacy hypothesis*). Finally, although suggested in literature (e.g., Jost et al., 2003), Crawford and others (2017) did not find support for a hypothesis that people with right-wing cultural beliefs are susceptible to prejudice toward groups with dissimilar beliefs whereas people with left-wing cultural beliefs are not (*social-specific asymmetry hypothesis*).

The differentiation between the two strands of political beliefs is especially important in Eastern European, post-communist countries (Boski, 1993; Kossowska & Van Hiel, 2003; Malka et al., 2014). While in Western countries, the cultural and economic beliefs are correlated, in Poland, where we conducted our research, there is no relationship between these two dimensions or the correlation might be negative (Duriez, Van Hiel, & Kossowska, 2005; Kossowska & Van Hiel, 2003; Baryła & Wojciszke, 2018). Thus, the examining relationship between the political beliefs and prejudice in this context might help to elaborate on the question whether the two dimensions uniquely predict prejudice toward groups perceived as right- or left-wing on a cultural or economic dimension.

Overview of the Studies

In the set of three studies, we tested the relationship between political beliefs, both social and economic ones, and attitudes toward groups with dissimilar beliefs as well as whether this relationship was explained by the perception of value violation. Thus, in Study 1 we measured political beliefs, the perception of value violation, and attitudes toward a range of groups. We expected right-wing cultural beliefs to be related to negative attitudes toward groups perceived as being culturally left-wing, and cultural left-wing beliefs to be associated with negative

attitudes toward groups perceived as being culturally right-wing. We also predicted a similar relationship between economic beliefs and attitudes toward groups with dissimilar beliefs on economic issues. However, as stated in *social primacy hypothesis* (Crawford et al., 2017), the effects for the cultural dimension should be stronger than for the economic dimension².

Furthermore, we hypothesized the perception of a value violation is expected to be a mechanism explaining the appearance of antipathy toward political outgroups. In Study 1 we measured the perception of value violation, and in Study 2.1 and Study 2.2 we also manipulated the targets' group membership and extremity of their opinions. In this way we attempted to elicit or decrease the perception of value violation. We expected that when a target of assessment does not demean, devalue, or question one's values, i.e., does not violate one's values, even if they are a member of a group representing dissimilar beliefs, political beliefs will not be associated with negative attitudes toward that target. However, a member of such a group having the extreme opinions will be seen as violating one's values and it is this that will elicit prejudice toward that target. This allowed us to experimentally test the prediction that value violation acts as a mechanism underlying prejudice toward groups espousing beliefs that are different from one's own.

Summing up, our research extends the existing body of research in three ways. First, we examine whether mere categorization vs. the perception of value violation are related to prejudice. Furthermore, by manipulating both the target's group membership and the extremity of their opinions, we are able to elaborate on the causal relationship between political beliefs, value violation, and attitudes toward individuals who are members of groups with dissimilar beliefs. Second, we tested the hypotheses in a sample outside US which gives an opportunity to test the model in a different cultural context. Importantly, our sample comes from a Poland and the relationship between the two dimensions of political beliefs is different than in the Western countries: cultural and economic beliefs tend to be unrelated or may even correlate negatively with each other (Boski, 1993; Kossowska & Van Hiel, 2003; Malka et al., 2014). Third, our research provides an opportunity for further examination of *social-specific asymmetry hypothesis* (Crawford et al., 2017) which states that the cultural right-wingers are more sensitive to value violation than cultural left-wingers. In particular, if the cultural right-wingers are more sensitive than left-wingers to value violation, they should respond with more negative attitudes toward members of groups with dissimilar beliefs.

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² At the moment of designing the current studies, we did not have more directional hypotheses regarding the relative strength of the prejudice within cultural vs. economy domains as at the time we were incognizant of research of Crawford and others (2017). However, we test this hypothesis too and discuss it in the current paper.

Study 1

Method

Participants. The sample consisted of 82 Polish undergraduate non-psychology students (55 women, 27 men) between 18-29 years of age ($M = 21.25$, $SD = 2.02$). Participants were recruited through an online advertisement posted on social media sites for people interested in taking part in psychological research. They participated in exchange for 10 PLN (roughly 2.50 USD). One person was excluded from the analyses due to missing data in their ratings of all the target groups.

Materials and procedure. Participants' political beliefs were assessed with the Political Beliefs Questionnaire (PBQ; Czarnek, Dragon, Szwed, & Wojciszke, 2017) which comprises Cultural ($M = 2.96$, $SD = 0.96$, *Cronbach's* $\alpha = .88$) and Economic Beliefs subscales ($M = 2.58$, $SD = 0.80$, *Cronbach's* $\alpha = .86$). The questionnaire consisted of 10 items per dimension with 5-point answer scales (from 1 = "Strongly disagree" to 5 = "Strongly agree")³. The higher the average score, the more right-wing the beliefs in the domains of culture or the economy. Both subscales were moderately positively correlated ($r = .33$, $p = .002$).

Next, participants indicated their attitudes toward 15 social groups selected on the basis of previous research on the ideological conflict hypothesis (Chambers et al., 2013) and studies relevant to the Polish political context (Bukowski & Winiewski, 2011). The groups taken into consideration in this study were as follows: pro-choice groups, feminists, homosexuals, proponents of civil partnerships, atheists, pro-life groups, traditionalists (supporters of traditional gender roles in the family), opponents of civil partnerships, Catholics, clergy, trade union members, the unemployed, the poor, businessmen, and the wealthy. Participants in Study 1 rated how likeable ("Do you like members of this group?"), as well as how value violating ("Do members of this group violate your important values?") members of the 15 target groups are. Both liking and perceived value violation were rated on a 6-point scale (from 1 = "Definitely not" to 6 = "Definitely yes"). To prevent the effect of order on participants' ratings the target groups were presented at random. Participants first responded to the PBQ, they then rated their attitudes toward the 15 social groups in question. Subjects answered demographic questions in a separate survey. This study was carried out online and all subjects participated voluntarily.

A separate group of subjects ($N = 44$, four excluded due to missing data; 28 women, 11 men, aged between 18-31 years, $M = 22.87$, $SD = 2.86$, average years of education $M = 15.21$, $SD = 2.22$; one person did not provide demographic data) rated the perceived ideological positions of 15 groups. Participants in this pilot study rated the ideological positions of each group on the dimensions of cultural ("How would you describe beliefs of this group members on social issues?") and economic beliefs ("How would you describe beliefs of this group members on economic issues?") with a 6-point answer scale (from 1 = "Strongly left-wing" to 6 = "Strongly right-wing"). The

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³ For the cultural dimension of PBQ, one item is excluded because of its poor psychometric properties (see Czarnek et al., 2017). In all studies presented here this item (no. 17) was excluded.

cultural and economic ratings were not correlated with each other, $r = 0.05$, $t = 1.15$, $p = 0.252$. The aggregated values of perceived cultural and economic beliefs of the 15 groups are presented in Table 1. These aggregated values were used in the main analysis.

Results

Attitudes. We tested the study hypotheses using multilevel linear models in RStudio (RStudio team, 2016) with lme4 (Bates, Maechler, Bolker, & Walker, 2015), sjPlot (Lüdtke, 2018), effects (Fox, 2003), and car (Fox & Weisberg, 2011) packages. The dependent variable were attitudes toward 15 target groups. We specified cultural and economic beliefs of participants as well as perceptions of cultural and economic beliefs of a group as fixed effects (see Crawford et al., 2017, for such a strategy). Furthermore, the intercept and slopes of perceived cultural and economic beliefs of groups were specified as random effects. All variables were mean-centered prior to analysis. The interactions were probed with a calculation tool of Preacher, Curran, and Bauer (2006) at ± 1 SD of predictor variables.

We expected an interaction between the cultural dimension of political beliefs and perceived cultural beliefs of a group on attitudes toward a target group. Similarly, we expected an interaction between economic beliefs and perceived economic beliefs of a group on attitudes toward a target group. For those interactions, we expected the more positive attitudes, the more similar group's perceived beliefs regarding cultural or economic issues.

Results are presented in Table 2. For the cultural dimension, we found an interaction between political beliefs and perceived cultural beliefs of a group. As expected, for groups perceived as culturally left-wing, right-wing cultural beliefs were negatively related to attitudes toward these groups, $b = -0.59$, $SE = 0.09$, $p < .001$. In contrast, for groups perceived as culturally right-wing, right-wing cultural beliefs were positively related to attitudes toward these groups, $b = 0.87$, $SE = 0.09$, $p < .001$. For the economic dimension, we found an interaction between political beliefs and perceived economic beliefs of a group. As expected, for groups perceived as economically left-wing, the right-wing economic beliefs were negatively related to attitudes toward these groups, $b = -0.31$, $SE = 0.09$, $p < .001$. In contrast, for groups perceived as economically right-wing, right-wing economic beliefs were positively related to attitudes toward these groups, $b = 0.21$, $SE = 0.09$, $p = .014$. We found unexpected marginally significant interaction between cultural political beliefs and perceived economic beliefs of a group. For groups perceived as economically left-wing, there was no relationship between cultural beliefs and attitudes toward these groups, $b = 0.06$, $SE = 0.07$, $p = .445$. In contrast, for groups perceived as economically right-wing, right-wing cultural beliefs were positively related to attitudes toward these groups, $b = 0.22$, $SE = 0.08$, $p = .006$. These interactions are presented in Figure 1.

Furthermore, to test *social primacy hypothesis*, i.e. prediction that the effects for the cultural dimension are stronger than for the economic dimension, we compared fit of a model with the interaction between cultural beliefs and perceived cultural beliefs and the interaction between economic beliefs and perceived economic beliefs constrained to be equal. The unconstrained model performed better than a constrained one, Wald $\chi^2(1) = 5.74$, $p = .017$, which is in favor of *social primacy hypothesis*. Additional analysis comparing other interaction coefficients is presented in the Supplemental materials.

Value violation. We tested an analogous model, with the same model specification as described above, but with value violation as a dependent variable instead of attitudes. We expected an interaction between political beliefs and perceived beliefs of a group separately for cultural and economic dimensions. The results are presented in Table 2 and they mirror the results presented above for the attitudes toward target groups. In particular, for the cultural dimension, we found an interaction between political beliefs and perceived cultural beliefs of a group. For groups perceived as culturally left-wing, right-wing cultural beliefs were positively related to perception of value violation posed by these groups, $b = 0.87$, $SE = 0.09$, $p < .001$. In contrast, for groups perceived as culturally right-wing, right-wing cultural beliefs were negatively related to value violation, $b = -0.71$, $SE = 0.10$, $p < .001$. Similarly, for the economic dimension, we found an interaction between political beliefs and perceived economic beliefs of a group. For groups perceived as economically left-wing, the right-wing economic beliefs were positively related to value violation posed by these groups, $b = 0.19$, $SE = 0.09$, $p = .030$. In contrast, for groups perceived as economically right-wing, right-wing economic beliefs were negatively related to value violation, $b = -0.27$, $SE = .10$, $p = .008$. The figure demonstrating all interactions for value violations are presented in Supplemental materials (Figure S1). We also found two unexpected interactions: between cultural beliefs and perceived economic beliefs of a group; as well as between economic beliefs and perceived cultural beliefs of a group. Simple slopes analysis for these interactions is presented in the Supplemental materials.

Furthermore, to test *social primacy hypothesis*, i.e. prediction that the effects for the cultural dimension are stronger than for the economic dimension, we compared fit of a model with the interaction between cultural beliefs and perceived cultural beliefs and the interaction between economic beliefs and perceived economic beliefs to be equal. The unconstrained model performed better than a constrained one, Wald $\chi^2(1) = 11.78$, $p = .001$, which is, again, in favor in the *social primacy hypothesis*. Additional analysis comparing other interaction coefficients is presented in the Supplemental materials.

Mediation through value violation. We predicted that the perception of value violation mediates the relationship between political beliefs and attitudes toward groups and that this relationship is further moderated by perceived political beliefs of a group. We tested two moderated mediation models with cultural or economic beliefs as predictors, and perceived cultural or economic beliefs as moderators of the relationship between predictor and mediator variables, respectively. In each model we controlled for the other dimension of political beliefs, e.g. when we tested a model with the cultural dimension of political beliefs as a predictor, the economic beliefs were entered into the model as a covariate. In our analyses we used the MLmed macro for SPSS (Rockwood & Hayes, 2017). The data was nested within groups and we estimated a within-group indirect effect as we were interested in the expected change in attitudes through value violation for people who differ by one unit in their political beliefs (Rockwood, 2017). The indirect effects were probed at $\pm 1SD$ values of a moderator.

In line with our hypotheses, we found that the relationship between cultural beliefs and attitudes toward target group through value violation was moderated by perceived cultural beliefs of a group, $W = 0.80$, 95% CI [0.71, 0.89]. The Monte Carlo confidence intervals did not contain 0 which suggest that the within-group indirect effect systematically varies as a function of perceived cultural beliefs of a group. For groups perceived as left-wing, the indirect effect between political beliefs and attitudes was negative, $IE = -0.59$, $SE = 0.04$, 95% CI [-0.67, -0.50]. In contrast, for groups perceived as right-wing, the indirect effect between political beliefs and attitudes was positive, $IE = 0.48$, $SE = 0.04$, 95% CI [0.41, 0.57].

Furthermore, we found that the relationship between economic beliefs and attitudes toward target group through value violation was moderated by perceived economic beliefs of a group, $W = 0.43$, CI [0.25, 0.62]. Again, confidence intervals did not contain 0 which suggest that the within-group indirect effect systematically varies as a function of perceived economic beliefs of a group. For groups perceived as left-wing, the indirect effect between political beliefs and attitudes was negative, $IE = -0.13$, $SE = 0.05$, 95% CI [-0.23, -0.03]. In contrast, for groups perceived as right-wing, the indirect effect between political beliefs and attitudes was positive, $IE = 0.18$, $SE = 0.05$, 95% CI [0.09, 0.28].

Discussion

Study 1 served as a test of the proposed relationship between political beliefs, attitudes, and perception of value violation. Taken together, the results corroborate the findings of Crawford and others (2017) and more generally speaking, claims of ideological conflict hypothesis: first, regarding the symmetry in prejudice on both sides of the political spectrum and second, regarding the differential impact of the economic and cultural dimensions of political beliefs on attitudes toward different target groups. Target groups endorsing more left-wing worldviews were rated less favorably and were perceived as value violating by participants holding right-wing beliefs. And vice versa, target groups perceived as being right-wing were rated less favorably by left-wingers. Importantly, this relationship was observed for both the cultural and economic dimensions of political beliefs,

which is in line with *dimension-specific symmetry hypothesis* (Crawford et al., 2017). Importantly, the relationship between political beliefs and attitudes toward target groups was mediated through perception of value violation and this relationship was moderated by the perception of group ideological standing.

We also found unexpected interactions between cultural beliefs and perceived economic beliefs of a group for attitudes and value violation; as well as unexpected interactions between economic beliefs and perceived cultural beliefs of a group for value violation. Interestingly, similar unpredicted interactions effect were also observed by Crawford and others (2017). The authors' explanation of this effect was suppression due to multicollinearity between the studied variables. In our sample, though, the correlations between the cultural and economic dimensions of beliefs as well as perceived beliefs were low. Thus, the suppression is not a likely explanation of the unexpected interaction effects. In contrast, it probably suggest that the two dimensions of political beliefs do not completely independently impact perception of groups. However, the predicted interactions effects were stronger than the unexpected ones which is in line with the current theoretical predictions.

Lastly, although we demonstrated that differences in attitudes and in the perception of value violation occur for people on both the right and the left within the domains of both cultural and economic beliefs but the effects were more pronounced for the cultural rather than the economic dimension. This supports the *social primacy hypothesis* of Crawford and colleagues (2017). However, we presented the results for only several groups which all were political in nature as the goal of this study was to establish the relationship between political beliefs and attitudes toward *political* outgroups. Furthermore, the majority of target groups pertained to cultural rather than economic dimension. Next studies should thus focus on wider variety of social groups, and especially those pertaining to the economic dimension.

Study 2

In the Study 1, we were focused on the relationship between the cultural and economic dimensions of political beliefs and attitudes toward groups with beliefs that differ from one's own. We also examined how this relationship was mediated by the perception of value violation. The objective of the second study was to experimentally test and expand on the results of Study 1. As already mentioned, we hypothesized that value violation, rather than the mere categorization of a person as an outgroup member, is a key factor in explaining prejudice toward political outgroups. In order to test this hypothesis further, in Study 2 we manipulated with target extremity, high vs. low, which were expected to elicit high and low perception of value violation, respectively. If the perception of value violation is a genuine mediator of the relationship between political beliefs and attitudes toward members of groups professing beliefs at odds with one's own, participants in the condition in which the target expresses moderate opinions should show a smaller (or no) mediated effect in comparison to the condition in which a target expresses extreme opinions. Such a design also allows us to elaborate on the causal relationship

between political beliefs, the perception of value violation, and attitudes toward groups professing beliefs other than our own.

Because we were interested in the two dimensions of political beliefs, we ran two independent studies: Study 2.1 focused on the cultural dimension of political beliefs and Study 2.2 focused on the economic dimension of political beliefs. In both studies, we manipulated group membership, as well as the extremity of the opinions expressed by the target person. We hypothesized that this manipulation will affect the perception of value violation posed by that individual and thus the attitudes expressed by participants toward this person.

Study 2.1

Method

Participants. Our initial sample consisted of 317 people. Participants were recruited through an online advertisement posted on social media sites for people interested in taking part in psychological research. However, we excluded subjects who did not finish the study, i.e., they had missing data on at least one variable of interest ($N = 66$) and/or those who failed to pass the data quality check ($N = 48$). In the data quality check, we asked participants three multiple-choice questions with 5 alternatives about the vignettes they had read (the exact questions are available in Supplemental Materials in a section regarding Study 2.1). Only participants with at least two correct responses were included in the dataset. We decided to include such a rigorous approach to ensure high quality data (i.e., making sure that participants read manipulation vignettes carefully), especially because the study was run online. The exclusion of subjects was done before we tested the research hypotheses. Our final dataset consisted of 203 people (42 men, 161 women) between the ages of 18 and 53 years old ($M = 23.27$, $SD = 4.60$). All the participants, but three people, reported that they completed at least high school education. Participants took part in a study in exchange for inclusion in a raffle of four 50 PLN (13 USD) rewards.

Materials and Procedure. Participants were randomly assigned to one of four experimental conditions in which we manipulated the target's group membership (atheist vs. Catholic) and the extremity of their opinions (extreme vs. moderate). In each condition, participants read only one short vignette (circa 170 words), in which a target person expressed their opinion on religion classes at public schools. Religiosity is an important part of right-wing cultural beliefs in Poland (e.g., Boski, 1993) and religion at school was recently a topic of heated public debate with polarized opinions on the left and the right. Thus, we chose to focus on this issue as it is relevant to both right- and left-wing values. While the values of right-wing participants will be violated by those advocating for the cancelation of religion classes, the values of left-wing participants will be violated by those advocating the retention of religion classes at schools. Vignettes presented opinions of: an extreme atheist, a moderate atheist, an extreme Catholic, and a moderate Catholic. While atheists represent a group perceived as culturally left-wing, Catholics represent a group perceived as culturally right-wing. In the first condition, we presented participants with a target who was an

extreme atheist strongly advocating for the removal of religion classes from schools, thus, violating right-wing attachment to religion. In the second condition, an atheist expressed moderate views on this issue, as he did not support the removal of religion from schools. We hypothesized that the latter atheist would not be perceived as value violating by right-wing participants. In the third condition, we presented participants with an extreme Catholic who strongly advocated for mandatory religion classes at schools. We expected him to be perceived as value violating by left-wing participants as he disrespected the left-wing value of secular education. In the fourth condition, we presented participants with a Catholic as well, but a moderate one, in that they preferred to teach religion at churches instead of at schools. Thus, it was expected that this Catholic target should not be perceived as value violating by left-wing participants. All vignettes are available in the Supplemental materials in section regarding Study 2.1.

The perceived extremity of the targets' opinions was tested in a separate study in which 11 competent judges (researchers and doctoral students in social psychology) rated on a 5-point scale the extremity of the position. The results supported the use of these particular target positions within the study. The ratings for the extreme atheist ($M = 2.82$, $SD = 1.25$) were higher than for the moderate atheist ($M = 1.64$, $SD = 0.67$), $F(1, 10) = 6.50$, $p = .029$, partial $\eta^2 = .39$. For the Catholic targets, the ratings followed a similar pattern (although of marginal statistical significance), with the extremity ratings for the zealous Catholic ($M = 3.40$, $SD = 1.08$) being higher than for the moderate Catholic ($M = 2.50$, $SD = 0.71$), $F(1, 9) = 3.86$, $p = .081$, partial $\eta^2 = .30$. The effect sizes for both comparisons, the atheists and the Catholics, seems to be large. Although this statistical testing should be taken with caution as the sample was considerably small, the effect sizes for both comparisons, the atheists and the Catholics, are large.

Our dependent variable were attitudes toward the target person as assessed on a feeling thermometer (Converse & Presser, 1986). For this measure, participants rated their feelings toward the target person on a 10-point scale, ranging from 0° to 100°. The higher the score, the warmer, more positive the evaluation of the target. Finally, participants rated their perception of the value violation posed by *people like the target person* on a 6-point scale (from 1 – “Definitely not” to 6 – “Definitely yes”).

Participants' political beliefs were assessed with the PBQ subscales of Cultural Beliefs ($M = 2.77$, $SD = 0.95$, Cronbach's $\alpha = .88$) and Economic Beliefs ($M = 2.45$, $SD = 0.66$, Cronbach's $\alpha = .82$). The two scales were weakly negatively correlated, $r = -.20$, $p = .005$.

Participants first read one of the four vignettes containing a target's opinion on religion at public schools (each participant read the opinion of only one target person) and they then rated their attitudes toward the given target. Next, participants completed the PBQ⁴. Finally, they answered demographic and data quality check questions. The study was carried out online and all subjects participated voluntarily.

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⁴ This particular order of measures was used to make sure that participants are unaware of an aim of the study and to avoid priming participants' with their own beliefs.

Results

Attitudes. We tested the study hypotheses using linear regression RStudio (RStudio team, 2016) with sjPlot (Lüdtke, 2018), jtools (Long, 2018), and car (Fox & Weisberg, 2011) packages. The dependent variable was attitudes toward target individuals measured. The cultural and economic beliefs of participants, targets' group membership (left vs. right-wing) and their extremity of opinions (moderate vs. extreme) were introduced as predictors. We also controlled for gender and age of participants. Categorical variables were coded as 0-1. Continuous variables, except the DVs, were mean-centered prior to analyses.

We expected an interaction between the cultural dimension of political beliefs, targets' group membership and their extremity. In particular, we expected relationship between cultural beliefs and attitudes toward targets only for the extreme targets, positive for a right-wing target and negative for a left-wing target. The results are presented in the Table 3. We found an expected 3-way interaction between participants' cultural beliefs, targets' group membership and their extremity. Simple slope analysis demonstrated that for moderate targets, unexpectedly, the relationship between cultural political beliefs and attitudes toward the atheist was positive and significant, $b = 8.89$, $SE = 3.54$, $p = .013$, but not very strong in size; but for the Catholic, in line with expectations, it was insignificant, $b = 2.98$, $SE = 3.14$, $p = .344$. For the extreme targets, the relationship between cultural beliefs and attitudes was negative for the atheist, $b = -19.17$, $SE = 2.59$, $p < .001$, and positive toward the Catholic, $b = 12.93$, $SE = 2.96$, $p < .001$. The interactions are presented in Figure 2. The interaction between participants' economic beliefs, targets' group membership, and their extremity was insignificant. Additional analysis comparing the interaction coefficients is presented in the Supplemental materials.

Value violation. We tested a model with the same model specification as described for attitudes but with value violation as a dependent variable instead of attitudes. Similarly, we expected an interaction between the cultural dimension of political beliefs, targets' group membership and their extremity. The results are presented in the Table 3. We found an expected 3-way interaction between participants' cultural beliefs, targets' group membership and their extremity. In particular, we found that for moderate targets, there was no relationship between cultural political beliefs and attitudes toward the atheist, $b = 0.28$, $SE = 0.18$, $p = .119$, nor for the Catholic, $b = -0.11$, $SE = 0.16$, $p = .500$. In contrast, for the extreme targets, the relationship between cultural beliefs and attitudes was positive for the atheist, $b = 1.01$, $SE = 0.13$, $p < .001$, and negative for the Catholic, $b = -0.59$, $SE = 0.15$, $p < .001$. Figure demonstrating this interaction is presented in Supplemental materials (S2). The interaction between participants' economic beliefs, targets' group membership, and their extremity was insignificant. Additional analysis comparing the interaction coefficients is presented in the Supplemental materials.

Mediation through value violation. To test our hypothesis regarding the mediating role of value violation between political beliefs we used the PROCESS macro for SPSS (Hayes, 2018). We tested the moderated mediation model where the influence of political beliefs on attitudes toward the targets was mediated by the perception of value violation, and this relationship was further moderated by the targets' cultural beliefs (left- vs. right-wing) and the extremity of targets' opinion (moderate vs. extreme). Gender, age, and economic beliefs were included as covariates.

In line with our hypotheses, we found that the relationship between cultural beliefs and attitudes toward the targets through value violation was moderated by targets' group membership and extremity, $W = 13.85$, $SE = 3.66$, 95% CI [6.92, 21.18]. The confidence intervals for the overall index of moderated mediation (Hayes, 2015) did not contain 0 which suggests that the indirect effect systematically varied as a function of our manipulations. For the moderate atheist, unexpectedly, the indirect effect was negative, $IE = -3.33$, $SE = 1.48$, 95% CI [-6.58, -0.74], but for the moderate Catholic, the indirect effect was insignificant, $IE = 1.86$, $SE = 1.92$, 95% CI [-1.87, 5.71]. For the extreme atheist, the indirect effect was negative, $IE = -12.22$, $SE = 2.40$, 95% CI [-16.93, -7.42], and for the extreme Catholic, the indirect effect was positive, $IE = 6.83$, $SE = 1.80$, 95% CI [3.54, 10.62]. The indirect effects were stronger for the extreme targets than moderate ones both for atheists, $W = -8.88$, $SE = 2.47$, 95% CI [-13.79, -4.11], and for the Catholics, $W = 4.97$, $SE = 2.42$, 95% CI [0.38, 9.92]

Discussion

Consistent with the hypotheses, political beliefs in the cultural domain and the extremity of the target's opinion influenced the attitudes and perception of the value violation posed by a given target. For the Catholics as targets, there was a positive relationship between cultural beliefs and attitudes only for the extreme target, not the moderate one. The analogous relationship was observed for the perception of value violation and the perception of value violation mediated the relationship between cultural beliefs and attitudes but only for the extreme Catholics, not for the moderate one.

More complex relationship emerged for the atheists as targets. There was a strong and negative relationship between cultural beliefs and attitudes for the extreme target and for the moderate one, unexpectedly, this relationship was positive. For value violation, the relationship was strong and positive for the extreme atheist and weak and positive (though insignificant) for a moderate one. Despite this, value violation was mediator of the relationship between cultural beliefs and attitudes both for the extreme and moderate atheists, although stronger in size for the extreme one.

In summary, the results from this study are in line with our hypothesis that the perception of value violation, not mere identification of a person as an outgroup member, is a mechanism of the relationship between political beliefs on cultural issues and attitudes toward members of groups espousing beliefs dissimilar to our own.

However, the relationship between cultural beliefs, the perception of value violation, and attitudes, emerged for the left-wing target expressing a non-extreme position, which partially supports *social-specific asymmetry hypothesis* of Crawford and colleagues (2017). It is important to note that this applies only to the indirect effect, as the relationship between cultural beliefs and attitudes toward moderate target was positive. This effect may suggest that in fact, there is a degree of asymmetry in prejudice between people with right- and left-wing beliefs, with people on the right being more sensitive to value violation than people on the left. More research, with different left-wing targets presenting moderate and closedminded opinions, is needed to elucidate on the relationship that we found.

Study 2.2

Study 2.2 followed the same logic as Study 2.1: we manipulated targets' group membership and the extremity of their opinions in order to impact participants' perception of value violation and, in turn, their attitudes toward the given target. The focus in Study 2.2 was on the economic dimension of political beliefs.

Method

Participants. Our initial sample consisted of 262 people. Participants were recruited through an online advertisement posted on social media sites for people interested in taking part in psychological research. We excluded subjects who did not finish the study ($N = 40$) and/or those who failed to pass the data quality check ($N = 7$). In the data quality check, we asked participants three multiple-choice questions about the vignettes that they were presented (the exact questions are available in Supplemental Materials in section regarding Study 2.2.). Only participants with at least two correct responses were included in the dataset. Our final dataset consisted of 215 Poles (51 men, 164 women), between the ages of 18 and 70 ($M = 24.47$, $SD = 7.88$). All the participants, but three people, reported that they completed at least high school education. Subjects participated in the study in exchange for inclusion in a raffle of four 50 PLN (13 USD) prizes.

Materials. The design of the Study 2.2 mimics Study 2.1, except for the fact that instead of presenting opinions on religion classes, participants read one short vignette (circa 170 words) in which a target person (trade unions member vs. businessman) expressed their opinions on the welfare state (extreme vs. moderate). Vignettes presented opinions of: an extreme trade unions member, a moderate trade union members, an extreme businessman, or moderate businessman. While trade unions members represent a group perceived as being economically left-wing, businessmen represent a group perceived as being economically right-wing. In the first condition, we presented participants with the opinions of an extreme, active member of trade unions who strongly advocated for a welfare state and for economic equality. In the second condition, the trade union member's opinion was more moderate; he was skeptical toward welfare aid and unions. In third condition, we presented

participants with a target businessman who expressed extreme right-wing, neoliberal opinions (namely, a preference for economic reform that “liberalize the economy, by eliminating price controls, deregulating capital markets, and lowering trade barriers”; Boas & Gans-Morse, 2009, p. 143), including very negative opinions regarding the welfare state. In the fourth condition, the businessman was more moderate in his opinions, with a more positive attitude toward welfare and welfare recipients. Thus, both the extreme trade union member and the extreme businessman were supposed to elicit the perception of value violation from left- and right-wing participants respectively, in comparison to more moderate, non-extreme targets. All vignettes are available in the Supplemental materials in section regarding Study 2.2.

The extremity of targets' opinions was tested in a sample of competent judges as in Study 2.1. The results support the use of these manipulations. The ratings for the extreme trade union member ($M = 3.73$, $SD = 0.91$) were significantly higher than for the moderate one ($M = 1.45$, $SD = 0.69$), $F(1, 10) = 46.64$, $p < .001$, partial $\eta^2 = .82$. For the businessmen, the ratings followed a similar pattern, with extremity ratings for the zealous businessmen ($M = 3.09$, $SD = 1.04$) being higher than for more moderate one ($M = 2.18$, $SD = 0.60$). This difference was marginally significant $F(1, 10) = 4.35$, $p = .064$, partial $\eta^2 = .30$. The effect sizes for both extremity comparisons, the trade unions members and the businessmen, seems to be large.

Our dependent variable were attitude ratings on a feeling thermometer toward the targets. For this measure and for value violation we used the same questions as in Study 2.1. Participants' political beliefs were assessed with the PBQ subscales of Cultural Beliefs ($M = 2.63$, $SD = 1.07$, *Cronbach's* $\alpha = .91$) and Economic Beliefs ($M = 2.57$, $SD = 0.65$, *Cronbach's* $\alpha = .81$). The two scales were weakly negatively correlated ($r = -.16$, $p = .016$).

Procedure. Participants first read one of the four vignettes presenting a target's opinions on the welfare state (each participant read opinion of only one target person) and they then rated their attitudes toward the given target. Next, participants responded to the PBQ. Finally, participants answered demographic and data quality check questions. The study was carried out online and all subjects participated voluntarily.

Results

Attitudes. We tested the study hypotheses in a similar fashion as in Study 2.1. Likewise, we expected an interaction between the economic dimension of political beliefs, targets' group membership and their extremity. In particular, we expected relationship between economic beliefs and attitudes toward targets only for the extreme targets, positive for right-wing target and negative for left-wing target, but not for moderate targets. The results are presented in the Table 4. We found an expected 3-way interaction between participants' economic beliefs, targets' group membership and their extremity. Simple slope analysis demonstrated that for moderate targets, the relationship between economic beliefs and attitudes toward the trade union member was insignificant, $b = 1.83$, $SE = 4.37$, $p = .675$, but for the businessman, unexpectedly, it was negative, $b = -14.66$, $SE = 3.58$, $p < .001$. For the extreme targets, the relationship between economic beliefs and attitudes was negative for the trade union

member, $b = -15.08$, $SE = 3.22$, $p < .001$, and positive for the businessman, $b = 21.79$, $SE = 4.93$, $p < .001$. The interactions are presented in Figure 3. Interestingly, the interaction between participants' cultural beliefs, targets' group membership, and their extremity was significant. We present simple slopes analysis for this interaction in the Supplemental materials (Figure S3). Additional analysis comparing interaction coefficients is presented in the Supplemental materials as well.

Value violation. We tested an analogous model, with the same model specification as described for attitudes but with value violation as a dependent variable instead of attitudes. Similarly, we expected an interaction between the economic dimension of political beliefs, targets' group membership and their extremity. The results are presented in Table 4. We found an expected 3-way interaction between participants' economic beliefs, targets' group membership and their extremity. In particular, we found that for moderate targets, there was no relationship between economic beliefs and attitudes toward the trade union member, $b = -0.03$, $SE = 0.26$, $p = .914$, but, unexpectedly, positive for the businessman, $b = 0.42$, $SE = 0.21$, $p = .046$. In contrast, for the extreme targets, the relationship between economic beliefs and attitudes was positive for the trade union member, $b = 0.72$, $SE = 0.19$, $p < .001$, and negative for the businessman, $b = -0.87$, $SE = 0.29$, $p < .001$. Figure demonstrating this interaction is presented in Supplemental materials (Figure S4). Additional analysis comparing the interaction coefficients is also presented in the Supplemental materials.

Mediation through value violation. To test our hypothesis regarding the mediating role of value violation between political beliefs we used the PROCESS macro for SPSS (Hayes, 2018). We tested the moderated mediation model where the influence of economic beliefs on attitudes toward the targets was mediated by the perception of value violation, and this relationship was further moderated by the targets' group membership (left- vs. right-wing) and the extremity of targets' opinion (moderate vs. extreme). Gender, age, and cultural beliefs were included as covariates. In line with our hypotheses, we found that the relationship between economic beliefs and attitudes toward target group through value violation was moderated by targets' group membership and extremity, $W = 10.89$, $SE = 5.00$, 95% CI [2.72, 21.94]. The confidence intervals for the overall index of moderated mediation did not contained 0 which suggest that the indirect effect systematically varied as a function of our manipulations. For the moderate trade union member, the indirect effect was insignificant, $IE = 0.27$, $SE = 1.61$, 95% CI [-2.59, 3.87], but for the moderate businessman, the indirect effect was negative and marginally significant, $IE = -2.44$, $SE = 2.07$, 95% CI [-7.24, 0.92]. For the extreme trade union member, the indirect effect was negative, $IE = -4.24$, $SE = 1.93$, 95% CI [-8.48, -1.02], and for the extreme businessman, the indirect effect was positive, $IE = 3.94$, $SE = 2.07$, 95% CI [0.63, 8.67]. The indirect effects were stronger for the extreme targets in comparison to moderate ones, both for trade union members, $W = -4.51$, $SE = 2.55$, 95% CI [-10.28, -0.47], as well as for businessmen, $W = 6.39$, $SE = 3.34$, 95% CI [1.14, 14.06].

Discussion

As Crawford and colleagues (2017), in Study 2.2 we found that ideological conflict hypothesis predictions are valid for the economic dimension of political beliefs: political beliefs in the economic domain and the extremity of the target's opinion influenced the attitudes and perception of the value violation posed by a given target. For the trade union members as targets, there was a negative relationship between economic beliefs and attitudes only for the extreme target, not the moderate one. The analogous relationship was observed for the perception on value violation. Furthermore, the perception of value violation mediated the relationship between cultural beliefs and attitudes but only for the extreme trade union members, not for the moderate one.

For the extreme businessman, as expected, there was a positive relationship between beliefs and attitudes and negative relationship between beliefs and perception of value violation. Furthermore, the perception of value violation was a mediator between economic beliefs and attitudes. However, we observed unexpected effects for a moderate businessman as targets. The relationship between beliefs and attitudes was negative, between beliefs and value violation positive, and there was an indirect effect between beliefs, value violation, and attitudes. These effects are unexpected, as we predicted no relationships between beliefs and ratings of a moderate targets. In contrast, the pattern of results suggests as if the moderate businessman was treated more like a left-winger than a right-winger. We suppose that in a country with a rather well-developed welfare system, as in Poland it is possible that leftists perceive business people positively because they create jobs and pay more taxes which is the foundation of the welfare system. It is however, a *post hoc* explanation and the issue needs further examination. However, it also suggests that there is also a degree of asymmetry within economic dimension of political beliefs, here again, with right-wingers being more sensitive to value violation than left-wingers.

General Discussion

In this paper, we presented a series of three studies extending earlier research on ideological conflict hypothesis (e.g., Brandt et al., 2014; Chambers et al., 2013; Crawford & Pilanski, 2014; Wetherell et al., 2014). Our analysis showed that negative attitudes toward groups with dissimilar beliefs to our own (and individuals representing those groups) are prevalent for people with right- as well as left-wing political beliefs. The perception of value violation was a mediator of the relationship between political beliefs and attitudes. Furthermore, we found that the impact of political beliefs and the perception of value violation on attitudes toward outgroups holds true within both the cultural and the economic dimensions of political beliefs, as suggested by Crawford and others (2017) in their *dimension-specific symmetry hypothesis*. Although the idea that political beliefs can be subdivided into two dimensions is not new, this is often neglected in research on the relationship between political beliefs and attitudes toward outgroups. Our research confirm that both the cultural and economic dimensions of political

beliefs predict attitudes toward various outgroups. We believe that such a differentiation within political beliefs allows for more fine-grained analysis and is especially important now, as there is large number of individuals who do not identify themselves as being *purely* right- or left-wing (e.g., Feldman & Johnston, 2014). It seems to be especially important in post-communist countries where the structure of political beliefs does differ from those in Western societies (e.g., Malka et al., 2014).

Moreover, we examined the hypothesis that the perception of value violation, not the mere categorization of a person as a member of a *political* outgroup, is a main mechanism of prejudice. In Study 2.1 and Study 2.2 we manipulated the target's group membership, as well as the extremity of their opinions. Thus, Study 2.1 and Study 2.2 represent one of a few tests of the causal chain between political beliefs, the perception of value violation, and attitudes toward people with dissimilar beliefs to our own. We presented the evidence that the extreme targets, both left- and right-wing in the domain of culture and economy, elicited negative attitudes and were perceived as value violating by those who had dissimilar worldviews. For moderate targets, these effects were non-existent or smaller. This means that the mere categorization of a person as a *political* outgroup member is unlikely to elicit prejudice if that person does not explicitly violate one's own values. And as we suggested above, the perception of *political* outgroup members is a subject to the rules of person perception. Greenberg and Jonas (2003) claim that people's beliefs can be characterized by two dimensions: one is the ideological content of beliefs, and the other is the content free dimension of *ideological rigidity*. With that in mind, we believe that prejudice toward groups is the result of the interaction between the ideological and non-ideological dimensions of the target's beliefs. More specifically, as in models of person perception (e.g., Fiske & Neuberg, 1990; Fiske, Lin, & Neuberg, 1999), we hypothesized that the default reaction to an outgroup member usually relies on category-based information which leads to derogation. However, if additional individuating information of value non-violation is available, prejudice or other forms of outgroup derogation are suppressed. Individuating information of value non-violation prevent prejudice by blocking the mechanism of prejudice. These findings are also in line with the model of *political* person perception (P3 model; Crawford, Jussim, Madon, Cain, & Stevens, 2011). The P3 model offers predictions on whether one would rely on individuating or category-based information in person perception within political context. Here, we extend this model by suggesting that the intergroup context may moderate the utilization of individuating vs. category-based information.

Another interpretation of our findings could be that they reflect a shift from intergroup to interpersonal context (Brown & Turner, 1981). In particular, in Study 1, the intergroup context was highlighted because participants were asked rate their attitudes toward groups without any further information about these groups. In contrast, in Study 2.1 and Study 2.2 participants were presented with individual members of groups as well as their worldviews. Thus, the difference in attitudes could be ascribed to this shift from an intergroup toward an interpersonal context. However, in Study 2.1 and Study 2.2 we demonstrated that the members of groups with dissimilar beliefs, but only those who were not extreme ones, did not elicited negative attitudes. It means that an

interpersonal context did not suppress impact of beliefs similarity on attitudes. However, next studies may consider using more self-involving measures such as intention to help or to work with targets depending on their beliefs similarity. This is because responses in those measures of attitudes tend to be more correlated with a target group membership rather than similarity of beliefs (Brown & Turner, 1981).

It is also worth stressing that, although we did not predict this, we found evidence for not only *social primacy hypothesis* but also *social-specific asymmetry hypothesis* of Crawford and colleagues (2017). The effects for the cultural dimension of political beliefs turned out to be stronger than for economic dimension in Study 1. Furthermore, in Study 2.1, the relationship between cultural right-wing beliefs and attitudes toward culturally left-wing targets (atheists) was significantly mediated by the perception of value violation even if the target presented non-extreme opinions. This results are in line with claims that due to the values such as universalism and egalitarianism leftists, in comparison to rightists, are less likely to exhibit prejudice (Wetherell et al., 2013). It is also in line with a more general framework suggesting that people on the right are more sensitive to negative stimuli than people on the left (Hibbing, Smith, & Alford, 2014) and recent notions that there might be some symmetries and asymmetries when right- and left-wingers are compared (Jost, 2017). However, when attitudes toward a moderate atheist were examined, they, unexpectedly, were more positive for those with right-wing cultural beliefs. We are also aware that this effect might be specific to the political context of a current study or a particular scenario used in Study 2.1.

Finally, we would like to stress several limitations of the presented research. First, our sample sizes were not large and mainly composed of students. Future research on the relationship between the two dimensions of political beliefs and attitudes toward a wide variety of groups in Eastern-European countries should aim for larger and more representative samples. Second, in Study 2.1 and Study 2.2., we used only one target per condition and apart from the expected results, we found several unexpected and sometimes peculiar effects. This could be due to a nature of the studied phenomena but also because of a bias in study materials. Thus, next studies should extend the current findings with more diverse manipulations. Third, it would be important to investigate the attitudes with different measures than presented here. In particular, we used 1-item measures of attitudes and value violation. As already mentioned, more self-involving measures could be used in future studies, e.g., intention to collaborate. Lastly, our goal was to investigate prejudice defined as the negative attitudes toward a group or members of a group (Stangor, 2009). As majority of previous studies on the relationship between political beliefs and prejudice focused on the *prejudice gap* between right and left, here we claim that the prejudice is not necessarily a domain of right-wingers only. It, however, does not mean that any prejudice, especially prejudice against disadvantaged groups, is legitimized, nor that prejudice of right- and left-wingers have similar impact on the society. Assessing the impact of prejudice on a societal level was not the goal of the study. In contrast, we aimed at answering the question whether the social and economic political beliefs differentially impact attitudes toward groups and individuals with dissimilar beliefs. In our opinion, we provided supporting evidence for this hypothesis.

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Tables

Table 1

Mean perceived cultural and economic beliefs of the groups

Group	Dimension			
	Cultural		Economic	
	Mean	SD	Mean	SD
Pro-choice	1.83	0.87	2.85	0.77
Proponents of civil partnerships	2.23	0.86	2.95	0.75
Homosexuals	2.30	0.88	3.00	0.78
Feminists	2.35	0.95	2.90	0.81
Atheists	2.40	0.81	2.83	0.81
Wealthy	2.83	0.78	3.70	0.52
Businessmen	2.93	0.53	3.45	0.85
Poor	3.03	0.86	2.28	0.88
Unemployed	3.05	0.68	2.35	1.05
Trade union members	3.25	0.71	2.50	0.93
Clergy	3.65	0.62	2.85	0.80
Catholics	3.73	0.45	2.83	0.84
Opponents of civil partnerships	3.75	0.63	2.85	0.83
Traditionalists	3.83	0.45	2.98	0.80
Pro-life	3.85	0.43	3.08	0.76

Note. Higher scores indicates that a group is perceived as right-wing, lower scores indicate that a group is perceived as left-wing.

Table 2

Fixed effects of the multilevel model from Study 1 for attitudes and value violation

	Attitudes				Value Violation			
	<i>B</i>	<i>CI</i>	<i>SE</i>	<i>p</i>	<i>b</i>	<i>CI</i>	<i>SE</i>	<i>p</i>
Intercept	3.47	3.36 – 3.58	0.06	<.001	3.08	2.95 – 3.21	0.06	<.001
Cultural Beliefs	0.14	0.01 – 0.26	0.06	.036	0.08	-0.06 – 0.22	0.07	.279
Economic Beliefs	-0.05	-0.19 – 0.10	0.07	.518	-0.04	-0.20 – 0.13	0.08	.653
Group Perceived Cultural	0.26	0.09 – 0.42	0.08	.003	-0.36	-0.53 – -0.20	0.08	<.001
Group Perceived Economic	-0.20	-0.40 – 0.00	0.10	.053	0.31	0.13 – 0.50	0.10	.001
Cultural x Group Perceived Cultural	1.13	0.94 – 1.32	0.10	<.001	-1.22	-1.40 – -1.03	0.09	<.001
Cultural x Group Perceived Economic	0.23	-0.00 – 0.46	0.12	.055	-0.31	-0.53 – -0.09	0.11	.007
Economic x Group Perceived Economic	0.73	0.47 – 0.99	0.13	<.001	-0.65	-0.90 – -0.41	0.13	<.001
Economic x Group Perceived Cultural	0.16	-0.05 – 0.38	0.11	.140	-0.24	-0.46 – -0.03	0.11	.026
R^2 / Ω_0^2	.535 / .527				.535 / .529			

Table 3
Multiple Regression Analysis from Study 2.1 for attitudes and value violation

	Attitudes				Value Violation			
	<i>B</i>	<i>CI</i>	<i>SE</i>	<i>P</i>	<i>B</i>	<i>CI</i>	<i>SE</i>	<i>p</i>
Intercept	67.70	59.16 – 76.24	4.33	<.001	1.84	1.41 – 2.28	0.22	<.001
Cultural Beliefs	8.89	1.92 – 15.87	3.54	.013	0.28	-0.07 – 0.64	0.18	.119
Economic Beliefs	1.95	-7.25 – 11.15	4.66	.676	-0.28	-0.75 – 0.19	0.24	.244
Extremity of a target	-12.44	-20.16 – -4.72	3.91	.002	0.43	0.04 – 0.82	0.20	.033
Left vs. Right-wing target	0.62	-7.46 – 8.70	4.10	.879	0.34	-0.07 – 0.75	0.21	.104
Age	0.24	-0.37 – 0.86	0.31	.434	0.01	-0.02 – 0.04	0.02	.548
Gender	5.75	-1.42 – 12.93	3.64	.115	-0.21	-0.58 – 0.15	0.19	.247
Cultural Beliefs x Extremity	-28.06	-36.57 – -19.55	4.31	<.001	0.73	0.30 – 1.16	0.22	.001
Economic Beliefs x Extremity	1.69	-9.93 – 13.30	5.89	.775	-0.18	-0.77 – 0.41	0.30	.549
Cultural Beliefs x Left vs. Right-wing target	-5.91	-15.09 – 3.26	4.65	.205	-0.39	-0.86 – 0.08	0.24	.101
Economic Beliefs x Left vs. Right-wing target	-6.07	-18.45 – 6.31	6.28	.334	0.31	-0.32 – 0.94	0.32	.328
Extremity x Left vs. Right-wing target	-8.38	-19.45 – 2.70	5.61	.137	-0.30	-0.86 – 0.27	0.29	.300
Cultural Beliefs x Extremity x Left vs. Right-wing target	38.02	26.01 – 50.02	6.09	<.001	-1.21	-1.83 – -0.60	0.31	<.001
Economic Beliefs x Extremity x Left vs. Right-wing target	6.96	-10.53 – 24.45	8.87	.433	-0.20	-1.09 – 0.69	0.45	.652
R ² / adj. R ²	.455 / .418				.375 / .332			

Table 4
Multiple Regression Analysis from Study 2.2 for attitudes and value violation

	Attitudes				Value Violation			
	<i>B</i>	<i>CI</i>	<i>SE</i>	<i>p</i>	<i>b</i>	<i>CI</i>	<i>SE</i>	<i>p</i>
Intercept	65.25	58.59 – 71.92	3.38	<.001	2.20	1.80 – 2.59	0.20	<.001
Cultural Beliefs	0.80	-3.53 – 5.12	2.19	.716	0.15	-0.11 – 0.40	0.13	.258
Economic Beliefs	1.83	-6.78 – 10.45	4.37	.675	-0.03	-0.53 – 0.48	0.26	.914
Extremity of a target	-6.28	-13.37 – 0.81	3.60	.082	0.01	-0.41 – 0.43	0.21	.963
Left vs. Right-wing target	11.12	4.52 – 17.72	3.35	.001	-0.06	-0.45 – 0.32	0.20	.748
Age	0.10	-0.23 – 0.43	0.17	.542	0.02	-0.00 – 0.04	0.01	.087
Gender	-6.34	-12.17 – -0.52	2.96	.033	-0.29	-0.63 – 0.05	0.17	.098
Cultural Beliefs x Extremity	-3.40	-10.06 – 3.25	3.37	.314	-0.04	-0.43 – 0.35	0.20	.834
Economic Beliefs x Extremity	-16.92	-27.50 – -6.34	5.37	.002	0.75	0.12 – 1.37	0.32	.019
Cultural Beliefs x Left vs. Right-wing target	-3.36	-9.28 – 2.57	3.01	.266	0.06	-0.29 – 0.41	0.18	.737
Economic Beliefs x Left vs. Right-wing target	-16.50	-27.51 – -5.49	5.58	.004	0.45	-0.20 – 1.10	0.33	.171
Extremity x Left vs. Right-wing target	-7.65	-17.51 – 2.22	5.00	.128	0.40	-0.18 – 0.98	0.29	.178
Cultural Beliefs x Extremity x Left vs. Right-wing target	13.91	4.42 – 23.41	4.82	.004	-0.36	-0.92 – 0.20	0.28	.201
Economic Beliefs x Extremity x Left vs. Right-wing target	53.37	37.38 – 69.37	8.11	<.001	-2.04	-2.98 – -1.10	0.48	<.001
R ² / adj. R ²	.325 / .282				.179 / .126			

Figure captions

Figure 1. Interaction between political beliefs and perceived political beliefs of groups on attitudes toward target groups.

Figure 2. Interaction between participants' cultural beliefs, target political beliefs and their extremity on attitudes toward target individuals.

Figure 3. Interaction between participants' economic beliefs, target political beliefs and their extremity on attitudes toward target individuals.