Article

Ideological prejudice is stronger in ideological extremists (vs. moderates)

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Johanna Woitzel^{1*} Dand Alex Koch^{2*}

Abstract

The agency–beliefs–communion (ABC) model and worldview conflict research show that people rate groups as more moral and likable if they rate their ideology as more similar to the ideology of the self. This paper refers to this effect as ideological prejudice. There is a debate whether ideology moderates the effect size of ideological prejudice. Through three observational studies ($N_{S1} = 700$, $N_{S2} = 974$, $N_{S3} = 633$), this paper contributes to this debate in three ways. First and primarily, the paper shows that ideological prejudice is stronger in conservatives and progressives compared to people with more moderate ideological beliefs. Second, stronger ideological prejudice in ideological extremists (vs. moderates) holds when controlling for stronger ingroup favoritism in ideological extremists (vs. moderates). And third, the paper suggests that higher importance of own ideology in ideological extremists (vs. moderates) may explain why ideological prejudice is stronger in ideological extremists (vs. moderates). These findings develop a part of the ABC model of stereotypes, contribute to worldview conflict research, and help to explain why ideological polarization is divisive.

Keywords

ABC model, extremists and moderates, ideological prejudice, ingroup favoritism

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People decide whether to approach or avoid groups, cooperate or compete with them, and support or oppose them. To make these decisions, people form impressions of groups on several basic dimensions (Abele et al., 2021; Ellemers et al., 2020; Koch et al., 2021; Nicolas et al., 2021). The agency–beliefs–communion (ABC) model of stereotypes (Koch et al., 2016; Koch, Imhoff, et al., 2020) describes some of these dimensions. According to the ABC model, people spontaneously rate groups' agency/socioeconomic success (A). Higher A groups are seen as more powerful, high-status, wealthy, dominant, confident, and competitive, compared to lower A groups. Besides, people spontaneously form impressions of groups' ideological beliefs (B). Based on a factor analysis of ideology ratings, the ABC

Corresponding author:

¹Ruhr-University Bochum, Germany

²The University of Chicago Booth School of Business, USA

^{*}Both authors contributed equally. Order prioritizes student over adviser.

Johanna Woitzel, Faculty of Psychology, Ruhr-University Bochum, Universitätsstraße 150, Bochum, 44801, Germany. Email: johanna.woitzel@rub.de

model construes its beliefs dimension broadly (Koch et al., 2016). Conservative ideology is attributed to people rated as traditional, religious, conventional, and politically conservative. Progressive ideology is attributed to people rated as modern, science-oriented, alternative, and politically liberal. The ABC model also argues that people spontaneously rate groups' communion (C). Higher C groups are seen as more honest, trustworthy, benevolent, likable, warm, and altruistic (vs. lower C groups).

As part of an adversarial collaboration on the relations between basic dimensions of social perception (Abele et al., 2021), recent ABC model research shows that people infer groups' communion from their ratings of the groups' agency as well as beliefs. Specifically, people rate a group as more communal if they rate its agency as more similar to the agency of the self. And second, people rate a group as more communal if they rate its beliefs as more similar to the beliefs of the self (Imhoff et al., 2018; Koch et al., 2016, 2018; Koch, Imhoff, et al., 2020). The present research further examines the size of the latter effect for three reasons. First, further examining both effect sizes would make an overwhelming paper. Second, clarifying the size of larger effects has priority. The effect of beliefs-similarity on impressions of communion is twice as large as the effect of agency-similarity on impressions of communion (Koch, Imhoff, et al., 2020). Third, the literature on the size of the effect of beliefssimilarity on perceived communion is underdeveloped. Worldview conflict research shows that the effect is equally large/strong in conservatives as compared to progressive perceivers (Brandt & Crawford, 2020). Regardless of this, the effect could be stronger in conservatives and progressives compared to ideological moderates. Testing this would both inform worldview conflict research and develop a part of the ABC model, namely its description of the size of the effect of beliefs-similarity on perceived communion.

The remainder of the present research refers to the effect of beliefs-similarity on perceived communion as ideological prejudice, consistent with worldview conflict research showing that people are prejudiced towards groups whose ideology conflicts with their own (Bergh & Brandt, 2021; Brandt, 2017; Crawford et al., 2017). The present research shows stronger ideological prejudice in conservatives and progressives (vs. moderates), and provides two additional insights into ideology as a moderator of the effect size of ideological prejudice. These insights both inform worldview conflict research and develop a part of the ABC model.

Ideological Prejudice May Be Equally Strong in Conservatives and Progressives

Some personality traits and lifestyle aspects motivate prejudice against people who are different to the self. These traits and aspects include need for closure, preference for simplicity over nuance, valuing loyalty and purity, preference for familiarity over novelty, following routines, opposition to change and diversity, certainty about one's views, and rigidity. Conservatives score higher on all these personality traits and lifestyle aspects (Carney et al., 2008; Graham et al., 2009; Jost et al., 2003; Ruisch & Stern, 2021; Schwartz et al., 2012; Shook & Fazio, 2009; van Hiel & Merviede, 2004). As a result, several theoretical papers claim that ideological prejudice is stronger in conservatives compared to progressives (Badaan & Jost, 2020; Baron & Jost, 2019; Jost, 2017).

Research on worldview conflict disagrees (Brandt & Crawford, 2020). As to politics, conservatives' preference for conservative over liberal groups is as strong as liberals' preference for liberal over conservative groups (Chambers et al., 2013; Crawford, 2014; Crawford & Pilanski, 2014; Wetherell et al., 2013). No difference in ideological prejudice holds for both social and economic conservatives (vs. liberals) when they reflect on groups (Crawford et al., 2017; Czarnek et al., 2019). As to spiritual ideology, religious people's preference for religious over atheist groups is as strong as atheist people's preference for atheist over religious groups (Brandt & van Tongeren, 2017). And as to lifestyle ideology, conventional people's preference for conventional over alternative groups is as strong as

alternative people's preference for alternative over conventional groups (Brandt et al., 2015; Crawford & Brandt, 2019). In sum, there is a debate whether ideological prejudice is stronger in conservatives (vs. progressives) or equally strong in conservatives and progressives.

Ideological Prejudice May Be Stronger in Ideological Extremists (vs. Moderates)

This lack of difference in ideological prejudice between conservatives and progressives does not rule out that ideology moderates the effect size of ideological prejudice. A recent paper finds stronger ideological prejudice in ideological extremists (both conservatives and progressives) compared to ideological moderates (Voelkel et al., 2018). This is a single-study exploratory finding, however (the paper is on a different topic). The first new contribution of this paper is two affective–cognitive studies and one behavioral study that all confirm that ideological prejudice is stronger in ideological extremists (vs. moderates).

The second new contribution is confirming that stronger ideological prejudice in ideological extremists (vs. moderates) is independent of stronger ingroup favoritism in ideological extremists (vs. moderates). Ideological prejudice refers to rating a group as more moral and likable if its ideology appears to be more similar to the ideology of the self. Ingroup favoritism refers to rating ingroups as more moral and likable compared to outgroups. Groups whose ideology appears to be more similar to the ideology of the self are more likely to be ingroups of the self. Thus, research that aims to show a moderator of ideological prejudice must statistically control for the same variable as a moderator of ingroup favoritism (Brandt et al., 2019; Mason, 2018). This paper shows that stronger ideological prejudice in ideological extremists (vs. moderates) holds when statistically controlling for stronger ingroup favoritism in ideological extremists (vs. moderates).

Why should ideological prejudice be stronger in ideological extremists (vs. moderates)? Holding extreme (vs. moderate) ideological beliefs is more likely to be an important part of the self (Liu & Latané, 1998). Attaching importance to one's beliefs has various consequences (Eaton & Visser, 2008; Howe & Krosnick, 2017). People gather and remember information that confirms their important beliefs. They often think deeply about this information. Thus, people are more aware of their important (vs. unimportant) beliefs. In addition, people more strongly protect their important (vs. unimportant) beliefs by distrusting, disliking, and staying away from groups that hold dissimilar beliefs (Krosnick, 1988; Malhotra & Tahk, 2011). Thus, higher importance of own ideology in ideological extremists (vs. moderates) may explain why ideological prejudice is stronger in ideological extremists (vs. moderates). Relatedly, a recent paper explains stronger political intolerance in political extremists (vs. moderates) through higher importance of own political preferences but does not test this explanation (Ganzach & Schul, 2021). The third new contribution of the present research is providing suggestive, but not conclu-

Why Does Stronger Ideological Prejudice in Ideological Extremists (vs. Moderates) Matter?

sive, evidence in support of this explanation.

Stronger ideological prejudice in ideological extremists (vs. moderates) refers to conservatives' preference for conservative over moderate groups being stronger than moderates' preference for moderate over conservative groups. And it means that progressives' preference for progressive over moderate groups is stronger than moderates' preference for moderate over progressive groups. Thus, ideological polarization more ideological extremists and less ideological moderates—is divisive even if the ideological similarity between ideological extremists and the groups that they rate is the same as the ideological similarity between ideological moderates and the groups that they rate.

If part of the explanation of stronger ideological prejudice in ideological extremists (vs. moderates) is that ideological extremists (vs. moderates) rate their own ideology as more important to the self, interventions to mitigate ideological polarization's divisiveness can tackle not just the extremeness but also the importance people attribute to their own ideology.

New Developments on Ideological Prejudice in Ideological Extremists (vs. Moderates)?

A recent paper finds Republicans have colder feelings towards Democrats compared to Democrats' feelings towards Republicans. Importantly, the paper also finds colder feelings towards Democrats in more extreme Republicans and colder feelings towards Republicans in more extreme Democrats. This research (Ganzach & Schul, 2021) studies how people feel towards their political opposition and no other groups. Thus, the research argues that it finds stronger political intolerance in political extremists (vs. moderates) instead of finding stronger ideological prejudice in ideological extremists (vs. moderates), as reported here. Moreover, the present research shows stronger ideological prejudice in ideological extremists (vs. moderates) even when the ideological similarity between ideological extremists and the groups that they rate is the same as the ideological similarity between ideological moderates and the groups that they rate.

Political extremists (vs. moderates) use more negative language (Frimer et al., 2019), rate groups as less moral and likable (van Prooijen et al., 2015), and more strongly endorse punishment of groups whose ideology is not their own (van Prooijen & Krouwel, 2017). In all this research, however, the ideological similarity between political extremists and the groups that they reflect on is not measured, and it is probably lower than the ideological similarity between political moderates and the groups that they reflect on. Once more, the stronger ideological prejudice in ideological extremists (vs. moderates) reported here holds when keeping constant the similarity between ideologically ideological extreme raters and groups (vs. ideologically moderate raters and groups).

Political extremists (vs. moderates) rate their own ideology as factually and morally superior to other types of political ideology (Rollwage et al., 2018; Toner et al., 2013). This may explain why ideological prejudice is stronger in ideological extremists (vs. moderates). However, the present research supports a different explanation: Ideological prejudice is stronger in ideological extremists (vs. moderates) because ideological extremists (vs. moderates) rate their own ideology as more important to the self. In sum, stronger ideological prejudice in ideological extremists (vs. moderates) as shown here is related to, but goes beyond, previous research that compares political extremists and moderates.

The Present Research

The new contribution of this paper is threefold. First and primarily, it confirms that ideological prejudice is stronger in conservatives and progressives compared to ideological moderates. The paper shows that stronger ideological prejudice in ideological extremists (vs. moderates) is a more robust and larger effect than stronger ideological prejudice in conservatives (vs. progressives) as found in Study 1, stronger ideological prejudice in progressives (vs. conservatives) as found in Study 2, and equally strong ideological prejudice in conservatives and progressives as found in Studies 1 and 3. Second, the paper shows that stronger ideological prejudice in ideological extremists (vs. moderates) is independent of stronger ingroup favoritism in ideological extremists (vs. moderates). Third, it provides suggestive, but not conclusive, evidence that higher importance of own ideology in ideological extremists (vs. moderates) explains stronger ideological prejudice in ideological extremists (vs. moderates). These insights develop research on worldview conflict (Brandt & Crawford, 2020). They also develop the part of the ABC model of stereotypes that predicts inferences of communion from impressions of ideological beliefs (Koch, Imhoff, et al., 2020). (Developing the ABC model's second part, which predicts communion from agency, is for another paper.)

In Study 1 (N = 700), people rated 30 groups randomly selected from a pool of 184 real groups. People rated a group as more moral and likable if they rated its ideology as more similar to the ideology of the self. This ideological prejudice was

Ideology	Self-judgment	Study 1		Study 2		Study 3	
		n	0⁄0	п	%	п	%
By type							
Downright conservative	0–16	148	21.14	186	17.70	150	21.83
Moderately conservative	17-33	103	14.71	167	15.89	90	13.10
Slightly conservative	34-49	85	12.14	188	17.89	110	16.01
Slightly progressive	50-66	84	12.00	128	12.18	99	14.41
Moderately progressive	67-83	86	12.29	133	12.65	108	15.72
Downright progressive	84-100	194	27.71	249	23.69	130	18.92
By pinpoint							
Extreme conservative	0	56	8.00	85	8.09	80	11.64
Exactly moderate	50	20	2.86	70	6.66	34	4.95
Extreme progressive	100	73	10.43	117	11.13	64	9.32

Table 1. Distribution of ideology of the people sampled in the studies reported here.

stronger in ideological extremists (vs. moderates). In Study 2 (N = 974), people rated 30 real groups that are mentally most available to people from the U.S. (Koch et al., 2016). Again, ideological prejudice was stronger in ideological extremists (vs. moderates). This held when controlling for stronger ingroup favoritism in ideological extremists (vs. moderates). A mediation analysis suggested that ideological prejudice was stronger in ideological extremists (vs. moderates) because ideological extremists (vs. moderates) rated their own ideology as more important to the self. Study 3 (N = 633) extended Study 2's findings from affectivecognitive ratings of morality and likability to communal behavior (sharing resources with the same groups).

Scope of Validity

The present paper aimed to study U.S. residents whose ideology ranges from conservative (traditional, religious, conventional, and politically conservative) to progressive (modern, scienceoriented, alternative, and politically liberal), broadly construed as in the ABC model of stereotypes (Koch et al., 2016). To this end, the paper sampled almost 2,500 people from Prolific Academic and Mechanical Turk, platforms that provide access to diverse U.S. residents (Levay et al., 2016). Table 1 confirms that all studies in the paper sampled large and roughly equal numbers of conservative, moderate, and progressive U.S. residents. This ruled out the possibility that the reported results are due to under- or oversampling of some ideology. The present paper also aimed to study U.S. groups. To this end, Study 1 sampled 184 U.S. groups (see Table 2) that at least two other U.S. residents (recruited in Study 1 in Koch et al., 2016) had listed in response to "Think for a moment of the groups that structure society and name 40 of them." Studies 2 and 3 emphasized mental availability over completeness, and sampled the 30 U.S. groups that other U.S. residents (recruited in Study 5 in Koch et al., 2016) had listed most frequently in response to "What various types of people do you think today's society categorizes into groups?" Table 2 lists these groups.

Finally, the paper fitted linear mixed models (Judd et al., 2012) that treated both the U.S. residents and U.S. groups as random samples. This allowed simultaneously generalizing findings to other/future U.S. residents who compare other/future U.S. groups.

Open Science

Study 2 and Study 3 were preregistered (https:// aspredicted.org/blind.php?x=mw9yw8 for Study 2; https://aspredicted.org/blind.php?x=KTD_UDR

No. 1–46	No. 47–92	No. 93–138	No. 139–184
Academics	Doctors	Jews	Rich people
Activists	Drug users	Jocks	Rockers
Actors	Educated people	Latinos	Rural people
Adults	Elderly people	Lawyers	Scientists
Agers	Elites	Lesbians	Seniors
Agnostics	Emos	Liberals	Short people
Alcoholics	Employed people	Libertarians	Single parents
Americans	Engineers	Loners	Singles
Amish	Environmentalists	Lower class people	Skaters
Anarchists	Ethnic people	Married people	Skinny people
Arabs	Europeans	Men	Smart people
Artists	Families	Mentally ill people	Smokers
Asians	Farmers	Mexicans	Snobs
Atheists	Fat people	Middle class people	Soccer moms
Athletes	Fathers	Middle-aged people	Socialists
Baby boomers	Females	Military	Socialites
Bankers	Feminists	Millennials	Soldiers
Baptists	Firefighters	Minorities	Southerners
Baseball fans	Foodies	Mormons	Sports fans
Bikers	Football fans	Mothers	Stoners
Bisexuals	Foreigners	Movie fans	Students
Blacks	Fraternities	Musicians	Surfers
Blue collar	Friends	Muslims	Tall people
workers	Gamers	Native Americans	Tea Party
Book clubs	Gangsters	Neighborhoods	Teachers
Boy scouts	Gays	Nerds	Techies
Buddhists	Geeks	Northerners	Teenagers
Business people	Generation Y	Nurses	Tomboys
Canadians	Girl scouts	Old people	Transgender people
Catholics	Golfers	Outcasts	Uneducated people
Celebrities	Goths	Parents	Unemployed people
Cheerleaders	Gun owners	Poets	Union members
Children	Heterosexuals	Police officers	Upper class people
Chinese	Hippies	Politicians	Urban people
Christians	Hipsters	Poor people	1 1
Classmates	Hispanics	Preps	Vegans Vegetarians
Clubs	Homeless people	Professionals	Vegetarians Veterans
	Homosexuals	Professors	
College students Communists	Hindus	Protestants	Wealthy people
Conservatives		Punks	Welfare recipients
00110011100	Hunters Illegal aliens		White collar Whites
Coworkers Criminals	0	Racists Rebels	Whites
	Immigrants Independents		Women Working class
Cubans	Independents	Rednecks	Working class
Dancers	Indians	Religious people	people
Democrats	Intellectuals	Republicans	Writers
Disabled people	Intelligent people	Retirees	Young people
Divorced people			Zealots

Table 2. Societal groups sampled: Study 1.

for Study 3), and all studies report all conditions and measures. Studies 2 and 3 preregistered 400 people and collected data from 1,051 and 687 people, respectively, to increase statistical power beyond what it would have been with 400 people. No study collected data after analyzing part of it. All study materials, data, code, and results are available on the Open Science Foundation (OSF; https://osf.io/ h4bv9/?view_only=8173b83a29444f39819bd9dff4 fbeb02) website. All studies scaled all independent variables to make them vary from -5 to 5, and scaled all dependent variables to make them vary from 0 to 10. This allows direct comparison of effect sizes across studies.

Study 1

People rate a group as more likable and more moral if they rate its ideology as more similar to the ideology of the self (Brandt, 2017; Koch, Imhoff, et al., 2020). This paper refers to this effect as ideological prejudice. Study 1 tested whether ideological prejudice is stronger in ideological extremists (conservatives and progressives) versus moderates.

Methods

Participants. Study 1 sampled U.S. residents (336 men, 363 women, and one preferred not to say; $M_{\text{age}} = 39.66$) from Prolific Academic. These 700 people received US\$1.25 plus a bonus of US\$0.75 to "rate yourself and 30 groups on seven dimensions."

Likability of group. First, people used two sliders to rate their own likability twice ("I am . . ." and "1 month ago, I was . . ."; $0 = most \ bad/off-put$ ting/negative in society,¹ 100 = most good/likable/positive in society). Next, people used 30 sliders, onebelow the other, to rate the likability of 30 groupsin random order ("Please compare these groups $to others in society"; <math>0 = most \ bad/off-putting/nega$ tive in society, 100 = most good/likable/positive in society). For each rater, the 30 groups were a randomselection from the 184 groups in Table 2. For reliable measurement, people then used the same sliders as before to rerate their own likability twice.

Morality of group. People used two sliders to rate their own morality twice ("I am . . ." and "1 month ago, I was . . ."; 0 = most deceitful/unethical/unreliable in society, 100 = most honest/moral/trustworthy in society). Next, people used 30 sliders, onebelow the other, to rate the morality of the 30groups in random order ("Please compare thesegroups to others in society"; <math>0 = most deceitful/unethical/unreliable in society, 100 = most honest/ moral/trustworthy in society). For reliable measurement, people then used the same sliders as before to rerate their own morality twice.

Own ideology, extremeness of own ideology, and selfgroup similarity in ideology. People used two sliders to rate their own ideology, operationalized broadly as in the ABC model of stereotypes (Koch et al., 2016; "I am . . ." and "I month ago, I was . . ."; 0 = most conservative/religious/traditionalin society, 100 = most liberal/science-oriented/modern insociety). Next, people used 30 sliders, one belowthe other, to rate the ideology of the 30 groups inrandom order ("Please compare these groups toothers in society"; <math>0 = most conservative/religious/traditional in society, 100 = most liberal/science-oriented/modern in society). For reliable measurement,people then used the same sliders as before torerate their own ideology twice.

Study 1 averaged people's four ratings of their own ideology ($\alpha = .99$) and computed extremeness of own ideology as the absolute difference between own ideology and 50, the midpoint of the slider capturing own ideology. For each combination of a rater and a group, Study 1 computed self-group similarity in ideology as 100 minus the absolute difference between the person's rating of their own ideology and their rating of the group's ideology.

Other measures. After measurement of own likability and the groups' likability, Study 1 measured own and the groups' morality, ideology, socioeconomic

No.	Fixed effect	<i>b</i> and 95% CI [LB, UB]	t	Þ
1	Self-group similarity in ideology	0.200 [0.184, 0.216]	24.34	< .001
2	Progressiveness of own ideology	-0.026 [-0.053, 0.000]	-1.94	.053
3	Extremeness of own ideology	0.065 [0.035, 0.095]	4.28	< .001
4	Similarity \times Progressiveness	0.000 [-0.003, 0.004]	0.21	.837
5	Similarity \times Extremeness	0.022 [0.018, 0.026]	10.44	< .001

Table 3. Self–group similarity in ideology predicted perceived likability of the group (1); this ideological prejudice effect was larger for people with a more extreme ideology (5).

Table 4. Self–group similarity in ideology predicted perceived morality of the group (1); this ideological prejudice effect was larger for people with a more extreme ideology (5).

No.	Fixed effect	<i>b</i> and 95% CI [LB, UB]	t	Þ
1	Self-group similarity in ideology	0.205 [0.190, 0.220]	26.61	< .001
2	Progressiveness of own ideology	-0.016 [-0.042, 0.010]	-1.23	.219
3	Extremeness of own ideology	0.065 [0.037, 0.094]	4.45	< .001
4	Similarity \times Progressiveness	-0.010 [-0.013, -0.007]	-6.30	< .001
5	Similarity \times Extremeness	0.023 [0.019, 0.026]	11.27	< .001

status, assertiveness, competence, and sociability in random order.

Demographics. At the end, people indicated their gender, age, race/ethnicity, and whether, based on attentive and serious responding, they recommended analyzing their data.

Results and Discussion

In two cross-classified linear mixed models (Judd et al., 2012, 2017) with two random intercepts (people and groups), Study 1 predicted likability (Model 1.1) and morality (Model 1.2) of group.

Model 1.1 included five fixed effects: selfgroup similarity in ideology, progressiveness of own ideology, extremeness of own ideology, similarity interacting with progressiveness, and similarity interacting with extremeness (Nos. 1–5 in Table 3). People rated a group as more likable if they rated its ideology as more similar to the ideology of the self (No. 1). This paper refers to this effect as ideological prejudice. Ideological prejudice was stronger in people with a more extreme ideology (No. 5). To facilitate interpretation of

Model 1.1's results, the paper estimated marginal means for perceived likability of similar and dissimilar groups separately for extreme conservatives, exact moderates, and extreme progressives. Model 1.1 estimated that extreme conservatives (0 on the 0-100 ideology scale) rated extremely conservative groups (0 on the ideology scale) 1.54 units of likability higher than exactly moderate groups (50 on the ideology scale), Ms = 7.61compared to 6.07. Model 1.1 estimated that extreme progressives (100 on the ideology scale) rated extremely progressive groups (100 on the ideology scale) 1.57 units of likability higher than exactly moderate groups, Ms = 7.37 compared to 5.80. However, Model 1.1 estimated that exact moderates (50 on the ideology scale) rated exactly moderate groups only 0.44 units of likability higher than extremely progressive and conservative groups, Ms = 5.73 compared to 5.29. Thus, likability-based ideological prejudice was 1.54 / 0.44 = 3.50 times stronger in extreme conservatives compared to exact moderates, and 1.57 / 0.44 = 3.57 times stronger in extreme progressives compared to exact moderates.

Model 1.2 included the same five fixed effects as Model 1.1 (Nos. 1–5 in Table 4). People rated a group as more moral if they rated its ideology as more similar to the ideology of the self (No. 1). This paper refers to this effect as ideological prejudice. Ideological prejudice was stronger in people with a more extreme ideology (No. 5). Again, the paper estimated marginal means for perceived morality of similar and dissimilar groups separately for extreme conservatives, exact moderates, and extreme progressives. Model 1.2 estimated that extreme conservatives rated extremely conservative groups 1.83 units of morality higher than exactly moderate groups, Ms = 7.65 compared to 5.82. Model 1.2 estimated that extreme progressives rated extremely progressive groups 1.34 units of morality higher than exactly moderate groups, Ms = 7.00 compared to 5.66. However, Model 1.2 estimated that exact moderates rated exactly moderate groups only 0.47 units of morality higher than extremely progressive and conservative groups, Ms = 5.55 compared to 5.08. Thus, morality-based ideological prejudice was 1.83 / 0.47 = 3.89 times stronger in extreme conservatives compared to exact moderates, and 1.34 / 0.47 = 2.85 times stronger in extreme progressives compared to exact moderates.

Although not the main focus of the paper, Study 1 tested whether ideological prejudice was stronger in conservatives (vs. progressives) independent of being stronger in ideological extremists (vs. moderates). Model 1.1 found equally strong ideological prejudice in conservatives and progressives (No. 4 in Table 3) when predicting likability of group. However, Model 1.2 found stronger ideological prejudice in conservatives (vs. progressives; No. 4 in Table 4) when predicting morality of group. This effect was smaller than stronger ideological prejudice in ideological extremists (vs. moderates; No. 5 in Table 4), though.

Study 2

Study 2 studied the mentally most available groups instead of all sorts of groups that people can think of (Study 1). Study 2 measured likability and morality of group in combination instead of separately. Likability in combination with morality is known as communion (Koch et al., 2016, 2021). Study 2 tested three hypotheses. Communionbased ideological prejudice is stronger in ideological extremists (vs. moderates). Second, this holds when controlling for stronger ingroup favoritism in ideological extremists (vs. moderates). Third, ideological prejudice is stronger in ideological extremists (vs. moderates) because ideological extremists (vs. moderates) rate their own ideology as more important to the self.

Methods

Participants. Study 2 sampled 1,051 U.S. residents from Prolific Academic, who received US\$1.50 to "rate groups and yourself." As preregistered, Study 2 excluded people who failed our attention check, rated the communion of 30 groups in less than 40 seconds, rated their own and the groups' beliefs in less than 50 seconds, rated the importance of their beliefs in less than 12.5 seconds, or recommended to "definitely" or "maybe" not analyze their data. These exclusions left 974 people in the analysis (551 men, 419 women, one other, and three preferred not to say; $M_{\rm ace} = 37.05$).

Communion of group. People used 30 sliders, one below the other, to rate the communion (operationalized as in the ABC model; Koch et al., 2016) of 30 groups in random order ("Please rate these groups on this dimension"; 0 = untrustworthy/dishonest/cold/threatening/repellent/egoistic, 100 = trustworthy/sincere/warm/benevolent/likable/altruistic). The 30 groups included Blacks, Whites, poor people, middle class people, rich people, Hispanics, Asians, Democrats, Republicans, gays, Christians, liberals, conservatives, working class people, transgender people, elderly people, students, lesbians, women, upper class people, Muslims, athletes, parents, nerds, hippies, immigrants, atheists, blue collar workers, religious people, and men (social categories; Lickel et al., 2000).

Own ideology, extremeness of own ideology, and self-group similarity in ideology. Next, people used two sliders to rate their own ideology twice ("I am ..." and "1 month ago, I was ..."; 0 = traditional/religious/ conventional/conservative, 100 = modern/science-oriented/alternative/liberal). Next, people used 30 sliders, one below the other, to rate the ideology of the same 30 groups in random order ("Please rate these groups on this dimension"; 0 = traditional/religions/conventional/conservative, <math>100 = modern/science-oriented/alternative/liberal). For reliable measurement, people then used the same sliders as before to rerate their own ideology twice.

Study 2 averaged people's four ratings of their own ideology ($\alpha = .99$) and computed extremeness of own ideology as the absolute difference between own ideology and 50, the midpoint of the slider capturing own ideology. For each combination of a rater and a group, Study 2 computed self-group similarity in ideology as 100 minus the absolute difference between the person's rating of their own ideology and their rating of the group's ideology.

Importance of own ideology. Study 2 showed participants a horizontally oriented dimension that ranged from "downright traditional/religious/ conventional/conservative" on the left to "downright modern/science-oriented/alternative/liberal" on the right. Referring to this dimension, Study 2 then informed participants about their own ideology. If their ideology was 0-16 [17-33/34-49], people read "You indicated being downright [moderately/slightly] traditional/religious/conventional/conservative." If their ideology was 50-66 [67-83/84-100], people read "You indicated being downright [moderately/slightly] modern/science-oriented/alternative/liberal." Next, people used four sliders, one below the other, to rate the importance of their own ideology in random order. First, "How much do you care about that you are downright [moderately/ traditional/religious/conventional/conslightly] servative [modern/science-oriented/alternative/ liberal]?" (0 = I care little, 100 = I care a lot). Second, "How important to you is it that you are downright [moderately/slightly] traditional/religious/conventional/conservative [modern/science-oriented/alternative/liberal]?" (0 = hardly important, 100 = very important). Third, "How much does it matter that you are downright [moderately/

slightly] traditional/religious/conventional/conservative [modern/science-oriented/alternative/ liberal]?" ($0 = matters \ little$, $100 = matters \ a \ lot$). And fourth, "How relevant to you is it that you are downright [moderately/slightly] traditional/religious/conventional/conservative [modern/science-oriented/alternative/liberal]?" (0 = hardlyrelevant, $100 = very \ relevant$). Study 2 averaged participants' four ratings of the importance of their own ideology ($\alpha = .97$).

Group membership. Next, people used 30 sets of radio buttons to judge their identification with the 30 groups in random order ("Do you identify as a member of the group Blacks [Whites/poor people/etc.]?"; "yes, strongly," "yes," "no," and "pre-fer not to say"). As preregistered, we coded both "yes, strongly" and "yes" as 5 (member of the group), "no" as -5 (no member of the group), and "prefer not to say" as 0 (unclear). Alternative coding of group membership—that is, "yes, strongly" coded as 5, "yes" coded as 0, "no" coded as -5, and "prefer not to say" excluded from all analyses—did not substantially change the results of Study 2 (see Model 2.1.1 in the OSF folder for this paper).

Demographics. At the end, people indicated their gender, age, race/ethnicity, and whether, based on attentive and serious responding, they recommended analyzing their data.

Results and Discussion

In a cross-classified linear mixed model (Judd et al., 2012, 2017) with two random intercepts (people and groups), Study 2 predicted communion of group.

Finding stronger ideological prejudice in ideological extremists (vs. moderates). Model 2.1 included eight fixed effects: self–group similarity in ideology, progressiveness of own ideology, extremeness of own ideology, similarity interacting with progressiveness, similarity interacting with extremeness, group membership, membership interacting with progressiveness, and membership interacting with

No.	Fixed effect	<i>b</i> and 95% CI [LB, UB]	t	Þ
1	Self-group similarity in ideology	0.246 [0.235, 0.258]	41.14	<.001
2	Progressiveness of own ideology	-0.030 [-0.055, -0.005]	-2.38	.018
3	Extremeness of own ideology	0.046 [0.021, 0.071]	3.55	<.001
4	Similarity \times Progressiveness	0.011 [0.008, 0.014]	8.18	< .001
5	Similarity \times Extremeness	0.031 [0.027, 0.033]	19.92	<.001
6	Group membership	0.085 [0.080, 0.090]	32.34	< .001
7	Membership \times Progressiveness	-0.006 [-0.007, -0.005]	-8.55	<.001
8	Membership \times Extremeness	0.001 [-0.001, 0.002]	0.88	.378

Table 5. Self–group similarity in ideology predicted perceived communion of the group (1); this ideological prejudice effect was larger for people with a more extreme ideology (5).

extremeness (Nos. 1-8 in Table 5). People rated a group as more communal if they rated its ideology as more similar to the ideology of the self (No. 1). This paper refers to this effect as ideological prejudice. Ideological prejudice was stronger in people with a more extreme ideology (No. 5). The paper estimated marginal means for perceived communion of similar and dissimilar groups separately for extreme conservatives, exact moderates, and extreme progressives. Model 2.1 estimated that extreme conservatives (0 on the 0-100 ideology scale) rated extremely conservative groups (0 on the ideology scale) 1.73 units of communion higher than exactly moderate groups (50 on the ideology scale), Ms = 7.93 compared to 6.20. Model 2.1 estimated that extreme progressives (100 on the ideology scale) rated extremely progressive groups (100 on the ideology scale) 2.29 units of communion higher than exactly moderate groups, Ms = 8.19 compared to 5.90. However, Model 2.1 estimated that exact moderates (50 on the ideology scale) rated exactly moderate groups only 0.46 units of communion higher than extremely progressive and conservative groups, Ms = 6.05 compared to 5.59. Thus, ideological prejudice was 1.73 / 0.46 = 3.76 times stronger in extreme conservatives compared to exact moderates, and 2.29 / 0.46 = 4.98 times stronger in extreme progressives compared to exact moderates.

Although not the main focus of the paper, Study 2 tested whether ideological prejudice was stronger in conservatives (vs. progressives) independent of being stronger in ideological extremists (vs. moderates). Model 2.1 found stronger ideological prejudice in progressives (vs. conservatives; No. 4). This effect was smaller than stronger ideological prejudice in ideological extremists (vs. moderates; No. 5), though.

Robustness checks. Participants rated their ingroups as more communal than their outgroups (No. 6). This paper refers to this effect as ingroup favoritism. As predicted, stronger ideological prejudice in ideological extremists (vs. moderates; No. 5) held when statistically controlling for stronger ingroup favoritism in ideological extremists (vs. moderates; No. 8).

Suggesting an explanation. Study 2 hypothesized that ideological prejudice is stronger in ideological extremists (vs. moderates) because ideological extremists (vs. moderates) rate their own ideology as more important to the self. Initially, Study 2 tested this explanation by expanding Model 2.1 with main and interaction effects of importance of own ideology. However, a reviewer argued that this preregistered test is outdated and no longer seen as convincing evidence in support of an explanation. Thus, Study 2 instead relied on a mediated moderation test. However, there is no software routine for an all-in-one test of mediated moderation in Study 2 because of its cross-classified data (each person rated each group), withinsubjects direct effect (ideological prejudice varied between groups within each person), betweensubjects moderator (extremeness of own ideology varied between people), and between-subjects mediator (importance of own ideology also varied between people). Thus, Study 2 instead relied on a two-step test of mediated moderation (see Table S1 in the supplemental material).

In the first step, Study 2 predicted communion of group in a cross-classified linear mixed model with a fixed effect for self-group similarity in ideology, random intercepts for people and groups, and random slopes for self-group similarity in ideology. In this model, the fixed effect of ideological similarity indicated how well it predicted communion of group across all people and groups. The random intercept for people indicated communion of group across all groups but separately for each person. The random slope of ideological similarity within the random intercept for people indicated how well ideological similarity predicted communion of group separately for each person. The random intercept for groups indicated communion of group across all people but separately for each group. The random slope of ideological similarity within the random intercept for groups indicated how well ideological similarity predicted communion of group separately for each group. Study 2 recorded each person's random slope for self-group similarity in ideology, providing a single index of the strength of each person's ideological prejudice.

In the second step, Study 2 took an analytical approach proposed and validated by Yzerbyt et al. (2018). Study 2 found that the extremeness of people's own ideology predicted the importance of their own ideology for the self. The point estimate for this a-path was 0.42, SE = 0.02, t(972) =18.21, p < .001. Second, importance of own ideology predicted the strength of people's ideological prejudice as estimated and recorded in the first step. The point estimate for this b-path was 0.01, SE = 0.003, t(971) = 3.82, p < .001. Third, 5,000 Monte Carlo iterations confirmed an indirect effect from extremeness of own ideology via importance of own ideology to strength of ideological prejudice (point estimate = 0.01, 95% CI [0.002, 0.01]). These results were consistent with Study 2's hypothesis that ideological prejudice is stronger in ideological extremists (vs. moderates) because ideological extremists (vs. moderates) rate

their own ideology as more important to the self. However, Study 2 suggests the latter explanation rather than confirming it because state-of-the-art statistical mediation cannot prove theoretical mediation (K. Fiedler et al., 2011, 2018).

Study 3

In the dictator game (Böhm et al., 2018), people share resources with others more generously if they judge them as more similar to the self (Ben-Ner et al., 2009; S. Fiedler et al., 2018). Study 3 tested whether generosity-based ideological prejudice is stronger in ideological extremists (vs. moderates). Study 3 also tested whether this holds when controlling for stronger ingroup favoritism in ideological extremists (vs. moderates). Besides, Study 3 tested whether ideological prejudice is stronger in ideological extremists (vs. moderates) because they rate their own ideology as more important to the self. In sum, Study 3 aimed to generalize the results of Study 2 from affective-cognitive ratings of communion to communal behavior (sharing resources with the same groups).

Methods

Participants. Study 3 sampled 687 U.S. residents from TurkPrime (add-on to Mechanical Turk), who received US\$1.50 to "distribute money between yourself and members of 30 groups, and rate yourself and these groups." As preregistered, Study 3 excluded people who failed our attention check, rated their own beliefs and the beliefs of 30 groups in less than 50 seconds, rated the importance of their beliefs in less than 12.5 seconds, or recommended to "definitely" or "maybe" not analyze their data. These exclusions left 633 people in the analysis (336 men, 292 women, one other, and five preferred not to say; $M_{are} = 38.26$).

Generosity towards group. Study 3 informed participants that in a previous study, 1,591 U.S. residents sampled from Mechanical Turk had identified as a member of one of 30 groups (the groups examined in Study 2; Study 3 presented

No.	Fixed effect	<i>b</i> and 95% CI [LB, UB]	t	Þ
1	Self-group similarity in ideology	0.097 [0.083, 0.111]	13.51	< .001
2	Progressiveness of own ideology	-0.063 [-0.124, -0.002]	-2.03	.043
3	Extremeness of own ideology	-0.017 [-0.077, 0.043]	-0.56	.579
4	Similarity \times Progressiveness	-0.002 [-0.006, 0.001]	-1.27	.204
5	Similarity \times Extremeness	0.006 [0.032, 0.010]	3.02	.003
6	Group membership	0.053 [0.046, 0.060]	15.36	< .001
7	Membership \times Progressiveness	-0.004 [-0.006, -0.003]	-4.71	< .001
8	Membership \times Extremeness	0.002 [0.001, 0.004]	2.76	.006

Table 6. Self–group similarity in ideology predicted generosity towards the group (1); this ideological prejudice effect was larger for people with a more extreme ideology (5).

them as a list). Next, Study 3 informed participants that their task was to distribute US\$0.06 between themselves and one member of each of the 30 groups. In random order, people distributed US\$0.06 between the self and one member per group, for a total of $30 \times US$ \$0.06 = US\$1.80. People read: "MTurk worker [e.g., 724] in our database is a member of the group [e.g., Blacks]. What do you choose for MTurk worker [...]? Our message to MTurk worker [...] will be: 'After learning that you are a member of the group [...], another MTurk worker chose to distribute a bonus of \$0.06 by taking [...] and giving [...] to you.' [...] in this message depends on what you choose for MTurk worker [...]." By means of five buttons, people chose between taking US\$0.05 and giving US\$0.01, taking US\$0.04 and giving US\$0.02, taking US\$0.03 and giving US\$0.03, taking US\$0.02 and giving US\$0.04, and taking US\$0.01 and giving US\$0.05 (highest generosity). After completing Study 3, participants received the money they had chosen to take.

Own ideology ($\alpha =$. 99), extremeness of own ideology, self-group similarity in ideology, importance of own ideology ($\alpha =$.98), and group membership.

Study 3 measured these variables in the same way as Study 2. As in Study 2, alternative coding of group membership—that is, "yes, strongly" coded as 5, "yes" coded as 0, "no" coded as -5, and "prefer not to say" excluded from all

analyses—did not substantially change the results of Study 3 (Model 3.1.1 in the OSF folder for this paper).

Demographics. At the end, people indicated whether they believed that they would receive the money they had taken in the dictator game (way more than the majority [81%] indicated "yes"), and whether they believed that the other Mechanical Turk workers would receive the money they had given to them (more than the majority [68%] indicated "yes"). Finally, people indicated their gender, age, race/ethnicity, and whether, based on attentive and serious responding, they recommended analyzing their data.

Results and Discussion

In a cross-classified linear mixed model (Judd et al., 2012, 2017) with two random intercepts (people and groups), Study 3 predicted generosity towards group.

Finding stronger ideological prejudice in ideological extremists (vs. moderates). Model 3.1 included the same eight fixed effects as Model 2.1 in Study 2 (Nos. 1–8 in Table 6). People shared more money with a group if they rated its ideology as more similar to the ideology of the self (No. 1). This paper refers to this effect as ideological prejudice. Ideological prejudice was stronger in people with more extreme ideology (No. 5). The paper estimated marginal means for money shared with

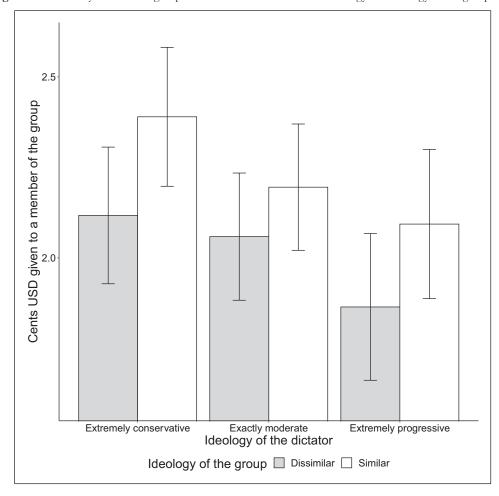


Figure 1. Generosity towards the groups as a function of the dictator's ideology and ideology of the groups.

Note. Similar ideology of the group refers to same ideology as the dictator. Dissimilar ideology of the group refers to exactly moderate groups for extremely conservative dictators as well as extremely progressive dictators. In contrast, dissimilar ideology of the group refers to extremely conservative groups as well as extremely progressive groups for exactly moderate dictators. The estimated effect of sharing more money with ideologically similar (vs. dissimilar) groups was stronger in dictators with extreme (vs. moderate) ideology. Error bars indicate 95% CIs.

similar and dissimilar groups separately for extreme conservatives, exact moderates, and extreme progressives. Model 3.1 estimated that extreme conservatives (0 on the 0–100 ideology scale) shared 0.27 cents more with extremely conservative groups (0 on the ideology scale) than with exactly moderate groups (50 on the ideology scale). Model 3.1 estimated that extreme progressives (100 on the ideology scale) shared 0.23 cents more with extremely progressive groups (100 on the ideology scale) than with exactly moderate groups. However, Model 3.1 estimated that exact moderates (50 on the ideology scale) shared only 0.14 cents more with exactly moderate groups than with extremely conservative and progressive groups. Thus, ideological prejudice was 0.27 / 0.14 = 1.93 times stronger in extreme conservatives compared to exact moderates, and 0.23 / 0.14 = 1.64 times stronger in extreme progressives compared to exact moderates (see Figure 1).

Although not the main focus of the paper, Study 3 tested whether ideological prejudice was stronger in conservatives (vs. progressives) independent of being stronger in ideological extremists (vs. moderates). Model 3.1 found equally strong ideological prejudice in conservatives and progressives (No. 4).

Robustness checks. People shared more money with their ingroups than their outgroups (No. 6). This paper refers to this effect as ingroup favoritism. As predicted, stronger ideological prejudice in ideological extremists (vs. moderates; No. 5) held when statistically controlling for stronger ingroup favoritism in ideological extremists (vs. moderates; No. 8). Moreover, it held when statistically controlling for the null effect of stronger ideological prejudice in progressives (vs. conservatives; No. 4).

Suggesting an explanation. Study 3 suggested an explanation (see Table S2 in the supplemental material) in the same way as in Study 2. In a first step, Study 3 predicted generosity towards group in a cross-classified linear mixed model with a fixed effect for self–group similarity in ideology, random intercepts for people and groups, and random slopes for self–group similarity in ideology. Study 3 recorded each person's random slope for self–group similarity in ideology in self–group similarity in ideology. Study 3 recorded each person's random slope for self–group similarity in ideology, providing a single index of the strength of each person's ideological prejudice.

In the second step, Study 2 found that the extremeness of people's own ideology predicted the importance of their own ideology to the self. The point estimate for this a-path was 0.46, SE =0.03, t(631) = 14.68, p < .001. Second, importance of own ideology predicted the strength of people's ideological prejudice as estimated and recorded in the first step. The point estimate for this b-path was 0.01, SE = 0.003, t(630) = 3.08, p = .002. Third, 5,000 Monte Carlo iterations confirmed an indirect effect from extremeness of own ideology via importance of own ideology to strength of ideological prejudice (point estimate = 0.004, 95% CI [0.001, 0.01]). These results were consistent with Study 3's hypothesis that ideological prejudice is stronger in ideological extremists (vs. moderates) because ideological extremists (vs. moderates) rate their own ideology as more important to the self. However, and as in

Study 2, Study 3 suggests the latter explanation rather than confirming it because state-of-the-art statistical mediation cannot prove theoretical mediation K. Fiedler et al., 2011, 2018).

General Discussion

People rate a group as more moral and likable if they rate its ideology as more similar to the ideology of the self (Brandt, 2017; Koch, Imhoff, et al., 2020). This paper refers to this effect as ideological prejudice and contributes three new insights into the effect.

First, the research reported here confirmed that ideological prejudice is stronger in ideological extremists (vs. moderates) even when the ideological similarity between ideologically extreme raters and groups is the same as the ideological similarity between ideologically moderate raters and groups. So, conservatives' preference for conservative (vs. moderate) groups is stronger than moderates' preference for moderate (vs. conservative) groups. And progressives' preference for progressive (vs. conservative) groups is stronger than moderates' preference for moderate (vs. progressive) groups. This held in three studies that measured ratings of groups' likability, morality, or communion (Studies 1 and 2) or communal behavior towards groups (sharing resources with them; Study 3).

There is an alternative way to test whether ideological prejudice is stronger in ideological extremists (vs. moderates). Does ideological prejudice decrease with the rater's own ideology changing from extremely conservative to exactly moderate? And, in the same statistical model, does ideological prejudice increase with the rater's own ideology increasing from exactly moderate to extremely progressive? Two-lines testing or interrupted regression simultaneously answers these two questions, and thereby tests whether ideological prejudice is stronger in ideological extremists (vs. moderates) in a way that rules out the inflated false positive rate that comes with instead using polynomial regression (Simonsohn, 2018). Two-lines testing confirmed stronger ideological prejudice in ideological extremists (vs. moderates) in all three studies reported here (Models 1.1.2, 1.2.2, 2.1.2, and 3.1.2 in the OSF folder for this paper).

Studies 1 and 2 measured ratings of morality, likability, and communion before ratings of ideology. Study 3 measured communal behavior before ratings of ideology. Thus, stronger ideological prejudice in ideological extremists (vs. moderates) emerged spontaneously—that is, without mention of the ideology of the groups or the ideology of the self. This is consistent with the spontaneous emergence of ideological prejudice in recent studies (Bergh & Brandt, 2021; Koch, Dorrough, et al., 2020; Koch et al., 2018).

The agency-beliefs-communion (ABC) model motivated this research. This model aims to describe how people rate and behave towards many groups. So far, one part of the ABC model confirmed that ideological prejudice emerges spontaneously (Imhoff et al., 2018; Koch, Dorrough, et al., 2020; Koch et al., 2016; Koch, Imhoff, et al., 2020) but did not yet test whether ideology moderates ideological prejudice. Thus, the first contribution of this paper-spontaneous ideological prejudice is stronger in ideological extremists (vs. moderates)-refines one part of the ABC model. Future research could develop the second part of the ABC model by testing whether agency moderates spontaneously emerging prejudice based on agency similarity. More generally and beyond the ABC model, future research could test moderators and mediators of the sizes of the effects of self-group similarity on people's prejudice towards groups when similarity is construed in terms of dimensions other than beliefs and agency. For example, people may be more prejudiced against foreigners when their identity as a citizen of their nation is more important to them.

The results of Studies 1–3 add nuance to worldview conflict research (Brandt & Crawford, 2020). This research argues that ideological prejudice is equally strong in conservatives and progressives (i.e., ideological symmetry) and not stronger in conservatives compared to progressives (i.e., conservative asymmetry; Baron & Jost, 2019). Study 1 found ideological symmetry and conservative asymmetry when predicting impressions of groups' likability and morality, respectively. Study 2 found stronger ideological prejudice in progressives compared to conservatives (i.e., progressive asymmetry) when predicting impressions of groups' communion. And Study 3 found ideological symmetry when predicting resources shared with groups. Thus, it appears the relation between people's conservative/progressive ideology and the strength of their ideological prejudice is not always zero (ideological symmetry) but rather heterogeneous. In any case, stronger ideological prejudice in ideological extremists (vs. moderates) was a larger effect than ideological symmetry, conservative asymmetry, and progressive asymmetry in Studies 1-3, which develops the literature on worldview conflict.

Second, Studies 2 and 3 measured people's membership in each group (yes vs. no) and tested whether ingroup favoritism (rating ingroups as more communal than outgroups in Study 2 and sharing more resources with ingroups than outgroups in Study 3) was stronger in ideological extremists (vs. moderates). Statistically controlling for stronger ingroup favoritism in ideological extremists (vs. moderates) did not interfere with the spontaneous emergence of stronger ideological prejudice in ideological extremists (vs. moderates).

Third, the paper suggested an explanation of stronger ideological prejudice in ideological extremists (vs. moderates). Extremeness and importance of own ideology correlated in Studies 2 and 3, rs = .50 (both ps < .001), respectively (Study 1 did not measure importance of own ideology). Studies 2 and 3 found that the data were in line with a model proposing that ideological prejudice, being stronger in ideological extremists (vs. moderates), is partially mediated by perceived importance of own ideology (which is higher in people with more extreme vs. moderate ideology). Given important limitations of mediation analyses (e.g., K. Fiedler et al., 2011, 2018; Yzerbyt et al., 2018), Study 2 and 3 thus suggested that higher importance of own ideology may be one explanation for why extremeness of own ideology magnified ideological prejudice. Future research

could test whether importance of own ideology and certainty about own ideology independently explain why ideological prejudice is stronger in ideological extremists (vs. moderates).

Study 1 offers a theoretical insight not mentioned so far. The pivotal effect of stronger ideological prejudice in ideological extremists (vs. moderates) generalized from measuring prejudice in terms of impressions of low likability (b = 0.02) and low morality (b = 0.02) to measuring prejudice in terms of impressions of low socioeconomic status (b = 0.01), low assertiveness (b = 0.01), and low competence (b = 0.02), all ps < .001, but not low sociability (b = 0.003, p = .109; see Table S3 in the supplemental material). This pattern of stronger effect sizes when measuring prejudice in terms of impressions of low likability and low morality validated the paper's measurement of these and not other dimensions of social evaluation (Abele et al., 2021). Theoretically, the pattern validated the ABC model, which claims that beliefs-similarity predicts communion (morality combined with likability) and not so much other dimensions of social evaluation.

The main practical insight of the paper is that interventions against the dark side of ideological prejudice (disliking, distrusting, avoiding, etc. ideologically dissimilar groups; Lammers et al., 2017; McCarty et al., 2016; Motyl et al., 2014) would benefit from tackling the extremeness as well as the importance of people's own ideology for the self. Decreasing the extremeness of their ideology would decrease the extent of ideological dissimilarity between a random rater and a random group. Thus, raters would like, trust, etc. groups more, on average. Decreasing the importance of their ideology for the self would decrease the effect of ideological dissimilarity between raters and groups. Thus, raters would like, trust, etc. groups even more, on average.

What types of interventions may decrease the importance of people's own ideology? Having trouble listing many reasons for the ideology of the self might temporarily decrease ratings of its importance (Fernbach et al., 2013; Weingarten & Hutchinson, 2018). Thinking about values/goals that are unrelated to ideology but equally important to the self (e.g., friends and traveling) might do the trick, too. A third candidate is elaborating on how one's ideology is a passion that harmoniously integrates with other facets of the self (vs. an obsession that relentlessly dominates other facets; Bélanger et al., 2019, 2020). The present research tried to manipulate the importance of people's own ideology in the first two ways described before. Supplemental Studies 1 and 2 document that these two manipulations were unsuccessful.

Future research could test whether the findings reported here generalize to forms of affective-cognitive appreciation other than ratings of likability, morality, and communion, including pure evaluation, affect ranging from cold to warm, and distinct emotions such as admiration and gratitude. Likewise, this paper predicted communal behavior towards groups (sharing resources with them; Crawford et al., 2017; Jenkins et al., 2018). Future research could test whether these findings generalize to other forms of behavioral appreciation such as cooperation (Koch, Dorrough, et al., 2020). The paper measured ideological dissimilarity in terms of the absolute difference between ratings of people's own ideology and their ratings of groups' ideology, and the paper measured people's membership in the groups in terms of answering "yes" or "no." Future research could measure ideological dissimilarity directly (Stern & Crawford, 2021) and group membership continuously, for example, on a scale from zero to extreme identification. And finally, future research could generalize the findings reported here beyond U.S. residents reflecting on U.S. groups.

Conclusion

Ideological prejudice is stronger in ideological extremists (vs. moderates). This effect is robust, as shown in this paper. It generalizes from ideological prejudice as rating ideologically more similar groups as more likable and moral to ideological prejudice as sharing more resources with ideologically more similar groups. Further, the effect is independent of stronger ingroup favoritism in ideological extremists (vs. moderates). Finally, the extremeness and importance of people's own ideology correlate, and ideological prejudice may be stronger in ideological extremists (vs. moderates) because they rate their own ideology as more important to the self. Tackling the extremeness or importance of people's own ideology for the self may decrease the effect size of divisive ideological prejudice.

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ORCID iD

Johanna Woitzel 🕩 https://orcid.org/0000-0002-8541-4469

Supplemental material

Supplemental material for this article is available online.

Note

 Throughout the paper, slashes in verbatim item descriptions indicate that the paper used various terms one below another to anchor both endpoints of a single slider.

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