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The Effects of Political Exclusion: Threatened Needs and Decreased Affiliation With Increased Anger and Antisocial Inclinations

Katarina E. AuBuchon[1] | Michelle L. Stock[2] | Emily Raibley[3] | Adrienne R. Carter-Sowell[4] | Paul J. Poppen[2]

[1]Lombardi Comprehensive Cancer Center, Georgetown University, Washington, District of Columbia, USA | [2]Department of Psychological and Brain Sciences, George Washington University, Washington, District of Columbia, USA | [3]Department of Psychological and Brain Sciences, Texas A&M University, College Station, Texas, USA | [4]Department of Psychology, University of Oklahoma, Norman, Oklahoma, USA

Correspondence: Katarina E. AuBuchon (Kea87@georgetown.edu)

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ABSTRACT

Social exclusion threatens psychological needs satisfaction, increases anger, and can contribute to group polarization. In two studies, we explored how *political* exclusion (vs. inclusion) influenced American voters' polarization. In Study 1 ($N = 135$, 60.7% Female, 61.5% White; Age $M = 19.63$), young adults were included or excluded in Cyberball from their political outgroup. In Study 2 ($N = 316$, 72.5% Female, 63.0% White; Age $M = 19.03$), Biden and Trump supporters were excluded or included in Cyberball from their political ingroup or outgroup during the 2020 election. Participants excluded (vs. included) from the political outgroup reported lower needs satisfaction (Study 1: $\eta_p^2 = 0.29$, Study 2: $\eta_p^2 = 0.35$), more anger (Study 2: $\eta_p^2 = 0.04$), less interest in outgroup affiliation (Study 1: $\eta_p^2 = 0.03$) and increased interest in outgroup antisociality (Study 2: $\eta_p^2 = 0.01$). Ingroup exclusion had mixed effects, and liberals (Biden supporters) and conservatives (Trump supporters) reported differences in exclusion responses. Political exclusion may initiate a cycle of polarization and exclusion by threatening psychological needs and increasing anger.

Though voting in the 2020 US presidential election was at its highest levels in the past 120 years, distrust between Democrats and Republicans was also at historic highs (Deane and Gramlich 2020), and this did not abate following the 2024 US elections (Olson 2024). In the US, the political landscape has two increasingly divided polarities–perceptions that Republicans/"conservatives" on one side and Democrats/"liberals" on the other cannot agree on basic facts more than doubled in the past 15 years, and have not changed in the past three election cycles (Dimock and Gramlich 2021; Doherty et al. 2024), and indeed have widening gaps in factual beliefs about reality (Rekker 2024). This widening animosity between the groups is referred to as affective polarization (Iyengar et al. 2019; Levendusky and Malhotra 2016). Partisans increasingly avoid the outgroup (people who identify as members of the opposing party), preferring the ingroup (people who identify as members of the same party; Butters and Hare 2020). This phenomenon is not unique to the US–globally, there is increasing perceptions of extremism on the right and left of the political spectrum (Higgins 2024; Reiljan 2019; Sarsfield et al. 2024; Yuhas 2024), often tied to division between specific political parties (McCarthy et al. 2024).

Increased affective polarization is concurrent with people experiencing political exclusion and rejection (Pinsker 2021;

Smith 2020). Throughout the 2020 and 2024 elections, people reported that friendships and family ties were permanently damaged by political animosity (Pinsker 2021; LifeStance Health 2024); in one survey, 44% of respondents said political discussions led to personal conflicts in 2024, and 18% reported ending a relationship due to opposing political views (LifeStance Health 2024)

Experiences of political exclusion are not only hurtful, but could contribute to polarization by decreasing willingness to engage with the political outgroup, and more willingness to act antisocially. When people are excluded, they report more negative attitudes toward the excluding group (Schaafsma and Williams 2012), and are less willing to interact with them (Wesselmann and Williams 2017). Furthermore, polarization could contribute to political antisociality (Smith and Jilani 2024; Reid et al. 2020). Indeed, 21% of Americans in one poll agreed that they may need to use violence to get the nation back on track (MaristPoll 2024). We posit that group-based political exclusion is one contributor to the increasing polarization of the American electorate by threatening psychological needs satisfaction and initiating affective polarization: avoiding outgroup affiliation and increasing outgroup antisociality.

1 | Political Identity, Exclusion, and Polarization

A person's political identity shapes their interactions with political ingroups and outgroups, and is distinct from political ideology (Dovidio et al. 2019; Iyengar et al. 2019). Political *identity* involves categorizing the self based on group markers (e.g., beliefs about social issues, regional identity; Iyengar et al. 2019); whereas *ideology* is the foundation for the differences between the groups which affect political group perceptions (Claessens et al. 2020; Clifford 2020). Political scientists assert that Americans have not experienced increasing ideological polarization. Rather, the two political groups have become more affectively polarized (Iyengar and Westwood 2015; Mason 2016; Strickler 2018), accentuating perceived ingroup similarities and outgroup differences (Ellemers and Haslam 2012). Affective polarization is thus a virtue of *perceived* differences (Mason 2016) which define impenetrable group lines, decreasing outgroup affiliation and increasing antisocial, negative outgroup interactions. In these circumstances, experiencing outgroup exclusion is likely.

Cyberball (Williams et al. 2000) is the most commonly used manipulation of social exclusion, used in hundreds of studies (Hartgerink et al. 2015), and used frequently for *group-based* exclusion (e.g., race Goodwin et al. 2010; Stock et al. 2013; and gender Cursan et al. 2017; Lieberman et al. 2021). In Cyberball, participants believe they are playing a ball-tossing game online with others and are either included (receive the ball an equal number of times) or excluded (receive the ball only once or twice). Research with Cyberball has validated that outgroup exclusion can be hurtful, particularly when exclusion is perceived to be unfair and/or due to group membership (Williams 2007). However, no studies have examined political exclusion's effects on political affiliation and antisociality.

The Temporal Needs-Threat model (Williams 2009) provides a theoretical framework for understanding exclusion's polarizing effects. Social exclusion is painful, and immediately results in negative affect (e.g., anger) and threatened fundamental psychological needs of belongingness (belonging in a group), self-esteem (reasonably high self-perception), meaningful existence (recognition as worthy of attention), and control (the ability to regulate one's environment; Williams 2009). Subsequently, people are likely to seek group-based validation to restore needs satisfaction (Williams and Nida 2011), such as by polarizing group attitudes to validate one's ingroup identity. Indeed, participants who are excluded (vs. included) by an outgroup report more negative outgroup attitudes (Schaafsma and Williams 2012; Williams et al. 2000). For French and Australian participants, exclusion from the political outgroup threatened participants' psychological needs and resulted in more negative outgroup attitudes (Fayant et al. 2014; Gonsalkorale and Williams 2007). Thus, political exclusion likely threatens psychological needs satisfaction, and may drive affective political polarization.

People's affiliation goals after exclusion are driven by people's goals to protect their (already depleted) needs satisfaction by avoiding potential exclusionary situations (Williams and Nida 2011) such as other outgroup interactions. For example, in one study, excluded (vs. included) participants were less willing to affiliate in a second task with the participants who excluded them, but more willing to affiliate with a new group of participants (Ren et al. 2020). Thus, outgroup exclusion (vs. inclusion) likely discourages future outgroup affiliation because the outgroup already excluded them. Because the individual was excluded by an outgroup member, they may generalize this exclusion experience as from the outgroup (vs. just the *individuals*), leading to future avoidance of the outgroup to avoid future exclusion.

Anger is another component of affective political polarization (Mason 2015). Anger is a primary effect of group-based exclusion (Smart Richman and Leary 2009), and drives outgroup aggression (Spanovic et al. 2010). Thus, when animosity is high, political *antisociality* may be appealing to the excluded individual (Williams et al. 2000; Williams and Nida 2011). Extant literature has established that social exclusion increases antisocial inclinations (Buckley et al. 2004) and antisocial behaviors (Nathan DeWall et al. 2010), especially towards the excluders (Chow et al. 2008; Twenge et al. 2001). Additionally, antisociality can be focused not only on the perpetrators of exclusion, but on people who share a group membership with the perpetrators (Gaertner et al. 2008). Past research also finds that anger mediates exclusion's effect on increased antisocial behaviors and cognitions (Chow et al. 2008; Williams and Nida 2011). Furthermore, anger does not facilitate social interaction (Hareli et al. 2016); people who are angry may avoid outgroup affiliation, so anger could also mediate the effect of exclusion on affiliation. Thus, following outgroup exclusion, the individual may be more inclined toward outgroup antisociality and more inclined to avoid outgroup affiliation mediated through increased anger.

1.1 | Exclusion From the Political Out-Versus In-Group

Political outgroup exclusion is important to examine because social exclusion is more likely from the outgroup (Williams 2009).

Political exclusion is especially tied to outgroup rejection and avoidance (Pinsker 2021; Smith 2020). Thus, examining the effects of *outgroup* exclusion is particularly relevant to understand its potential polarizing consequences.

In the literature, studies primarily focus on psychological needs satisfaction–not polarization–as an outcome. One study and its replication explored how political ingroup and outgroup exclusion impacted needs satisfaction (Fayant et al. 2014; Gonsalkorale and Williams 2007). Gonsalkorale and Williams (2007) excluded or included Australian participants in Cyberball by their political ingroup, political outgroup, or despised political outgroup (the KKK). Exclusion threatened participants' psychological needs similarly, regardless of whether it was from the political in- or outgroup. Fayant et al. (2014) replicated this finding with French participants–there was no difference in needs satisfaction or feeling hurt between those excluded by the ingroup versus outgroup. However, these studies were conducted outside of the US and did not examine anger, polarizing outcomes with group affiliation, or antisociality. Thus, expanding research on outgroup exclusion to include political contexts and polarizing outcomes is a contribution to the research.

Exclusion from the political ingroup is also relevant to explore in the present political context, where divides *within* the two groups could promote intragroup exclusion (e.g., Inskeep 2021; Montague 2021). For example, participants who were excluded by same-race (ingroup) players in Cyberball reported more threatened psychological needs than when excluded by different-race (outgroup) players (Sacco et al. 2014). Other studies find that outgroup (vs. ingroup) exclusion can be more threatening or depend on group membership; Goodwin et al. (2010) found that although African Americans' needs were more threatened when excluded by White Cyberball players, for White participants the effect of exclusion on psychological needs did not differ by the other players' race.

It also is unclear how ingroup or outgroup exclusion would influence politically polarizing outcomes. Theoretically, following exclusion from any group, people should seek to restore depleted psychological needs which could be through strengthening identification (Williams and Nida 2011). Thus, outgroup *or* ingroup exclusion could lead to more negative outgroup attitudes, anger, and outgroup antisociality, as well as decreased outgroup affiliation interest. However, one study found that ingroup (but not outgroup) exclusion led to more ingroup identifying political views (Schaafsma and Williams 2012). Thus, ingroup (not outgroup) exclusion could be more influential over political polarizing outcomes.

1.2 | The Ideological Divide–Avoidance of Threat and Uncertainty

American political ideology is defined on a left/liberal to right/conservative spectrum, and the public uses these two labels to define themselves and others (Jost et al. 2009). The social-motivational perspective of political ideology posits that political ideology is a behavioral motivator. Thus, people on different ends of the liberal-conservative spectrum have behavioral differences, such that conservatives have more of a need to reduce uncertainty and threat compared to liberals (Jost et al. 2003, 2009; Jost and Amodio 2012; Oxley et al. 2008). If liberals and conservatives differ in orientations toward uncertainty and threat, it is possible they would differ in their reaction to exclusion. However, little research has examined whether groups respond to exclusion differently, and none have examined this with political groups.

1.3 | Current Studies

We sought to understand how political group-based exclusion would impact participants' psychological needs, affective polarization, affiliation, and antisocial inclinations. We also sought to understand how exclusion from the in- versus outgroup could influence the effects of exclusion on polarization. Based on the social-motivational perspective of political ideology, we also explored whether liberals or conservatives differed in their reactions to exclusion. All procedures were approved by our Institutional Review Board.

2 | Study 1

Study 1 followed a 2 (Cyberball: inclusion vs. exclusion) × 2 (ideology: liberal vs. conservative) between-subjects design. We hypothesized that excluded (vs. included) participants would report lower needs satisfaction, more negative outgroup attitudes, more anger, and less outgroup affiliation interest. Based on the social-motivational perspective of political ideology, we explored whether conservatives (compared to liberals) would have more polarizing reactions (e.g., lower needs satisfaction, less outgroup warmth, and less affiliation interest) due to an aversion to the threat of exclusion. Furthermore, we expected that the effect of exclusion on affiliation inclinations would be mediated by threatened psychological needs and/or anger.

3 | Methods

3.1 | Participants

Participants in the Washington, D.C. metro area were eligible if they identified as politically liberal or conservative, current college students, and were eligible to vote in the 2020 election. Participants provided informed consent, and received course credit, $5 cash, or a $10 gift card. We recruited from the university's participant pool, with a small number of conservatives ($n = 13$) recruited from social media to even conditions during the pandemic. The target recruitment goal was ~140 based on previous Cyberball studies (Chow et al. 2008; Kimel et al. 2017).

3.2 | Procedure

Participants were told they would participate in an online activity with other college students, complete a survey, and complete a second (bogus) group political decision-making task. Participants entered a name and, to make political group

membership salient, selected a symbol to represent them (see Supporting Information S1: Appendix A). Participants "introduced themselves" to the other participants by writing a "post" about what is important to them politically. This method simulated ways in which people divulge their political identity through conversation. After writing their "post," participants proceeded to read the other three political outgroup "participants" posts, which were constructed based on previous responses in a pilot survey by D.C. area undergraduate students about their political beliefs (Supporting Information S1: Figure S1). Each participant was randomly assigned to be included (receive the ball an equal number of times) or excluded (receive the ball only once) in Cyberball (Williams et al. 2000), stratified by gender and ideology. Afterwards, participants completed post-survey measures and were debriefed.

3.3 | Precyberball Measures

Participants reported their gender, racial/ethnic group, age, and voter registration status (*yes, no*, or *unsure*). Ideology was measured with the American National Election Studies (2016) items on a 7-point scale (*Extremely Liberal* to *Extremely Conservative*; moderates were screened-out). Participants were coded as 0 = *conservative*, 1 = *liberal*.

3.4 | Postcyberball Measures

Needs satisfaction (Zadro et al. 2004) was measured immediately after Cyberball (e.g., "I felt good about myself;" 1 = *strongly disagree* to 5 = *strongly agree*). Items were averaged ($\alpha = 0.92$; Goodwin et al. 2010).

Anger was a computed mean of participants reports of feeling upset, angry, mad, and aggressive ($\alpha = 0.86$; 1 = *not at all* to 5 = *extremely*; Watson et al. 1988).

Outgroup warmth is a measure of affective polarization (Barnidge 2018; Iyengar et al. 2019). Participants reported how warm they felt toward liberals, Democrats, Republicans, and conservatives on an 11-point scale (1 = *0, quite cold or unfavorable* to 11 = *100, very warm or favorable feeling*). Participants' scores were recoded based on their ideology (i.e., a conservative's warmth toward liberals and Democrats), and a mean was calculated ($r = 0.70$).

As a measure of ***affiliation interest***, participants were informed that they would be participating in a second group decision-making task requiring them to make a political decision and justify it. Participants were asked how much they would like to do this second task with the same participants (i.e., their political outgroup; 1 = *Definitely Not* to 7 = *Definitely Yes*).

3.4.1 | Manipulation Checks

Participants indicated how excluded (1 = *totally included* to 7 = *totally excluded*) and rejected (1 = *totally accepted* to 7 = *totally rejected*) they felt (averaged, $r = 0.85$) Participants also specified what they believed the reason for their treatment in the game was (age, gender, political beliefs, race/ethnicity, or other), and rated the other participants' ideology (1 = *extremely conservative* to 7 = *extremely liberal*).

3.5 | Data Preparation and Analysis Plan

Analyses were conducted in SPSS v28. Of the 168 participants who completed Cyberball, 33 were removed; 14 (8.3%) reported during debriefing that they lied about their political ideology and 1 (0.5%) was not eligible to vote. We a-priori decided to remove participants for whom the group-based exclusion manipulation was weakened (Holte et al. 2022; Stock et al. 2011) and thus consistent with other Cyberball studies, we removed 6 (3.5%) who had previously participated in Cyberball, 5 (3.0%) who did not attribute their exclusion to political beliefs, and 7 (4.2%) who before debriefing indicated they did not believe the other players were real ($n = 135$; Buelow and Wirth 2017; Iannone et al. 2014; Syrjämäki et al. 2017; Syrjämäki and Hietanen 2020). Data collection was ongoing during the COVID-19 university closure, thus approximately half (51%; $n = 69$) of all participants participated in-person with the rest completing the study online. A sensitivity power analysis in G*Power indicated that with our sample size and $\alpha = 0.05$, we had 80% power to detect an effect as small as $\eta_p^2 = 0.055$.

Removed participants did not significantly differ in self-reported gender, race, ideology (liberal or conservative), or having participated online (vs. in-person) $\chi^2(1) < 0.45$, $ps > 0.265$. However, consistent with other Cyberball studies (Syrjämäki et al. 2017; Syrjämäki and Hietanen 2020) participants removed from analyses were more likely to be assigned to the exclusion (vs. inclusion) condition $\chi^2(1) = 6.90$, $p = 0.010$; likely because exclusion increased suspicion that the experience was not real.

To examine primary hypotheses, we ran 2 (Cyberball; inclusion vs. exclusion) × 2 (ideology; conservative vs. liberal) Analyses of CoVariances (ANCOVAs) controlling for gender and participation location. To test mediation hypothesis, we utilized Hayes' PROCESS Macro (v4.2; 5000 samples; Model 4). Primary hypotheses concerned group comparisons and are the focus of the results section; *b*-values are provided in the Supporting Information S1: Tables S1 and S2.

4 | Study 1 Results

Demographics are in Table 1, Table 2 displays descriptive statistics and correlations. Table 3 contains mean comparisons, 95% CIs, and hypothesis test statistics for main effects. A plurality of participants identified as White women (34.81%), were young ($M = 19.63$, SD = 1.97), and most were registered to vote (78.5%). Liberals were more likely to identify as women or nonbinary whereas conservatives were more likely to identify as men $\chi^2(1) = 25.20$, $p < 0.001$, however likelihood of identifying as conservative versus liberal did not depend on participants identifying as White (vs. nonwhite) $\chi^2(1) = 0.41$, $p = 0.52$.

TABLE 1 | Demographics.

	Study 1		Study 2	
	N	**%**	***N***	**%**
Gender				
Male	52	38.5	85	26.9
Female	82	60.7	229	72.5
Trans/Nonbinary	1	0.7	2	0.6
Race				
Asian/Pacific Islander	18	13.3	36	11.4
Black/African American	8	5.9	23	7.3
Hispanic/Latinx	14	10.4	34	10.8
White	83	61.5	202	63.9
Other/Multiracial	12	8.9	21	6.7
Registered to vote				
Yes	106	78.5	291	92.1
No	20	14.8	13	4.1
Unsure	9	6.7	12	3.8
Ideology				
Extremely liberal	7	5.2	18	5.7
Liberal	38	28.1	86	27.2
Slightly liberal	18	13.3	39	12.3
Lean liberal	5	3.7	8	2.5
Moderate	—	—	31	9.8
Lean conservative	4	1.5	5	1.6
Slightly conservative	34	22.3	41	13.0
Conservative	25	20.0	76	24.1
Extremely conservative	4	3.1	12	3.8

Note: Demographics for Study 1 ($n = 135$) and Study 2 ($n = 316$).

Online and in-person $\chi^2(1) = 2.31$, $p = 0.13$ and White versus nonwhite $\chi^2(1) = 0.03$, $p = 0.86$ participants were equally likely to be included or excluded.

4.1 | Manipulation Checks

Excluded participants ($M = 6.06$, $SE = 0.14$) reported feeling significantly more excluded/rejected than included participants ($M = 4.11$, $SE = 0.13$; $p < 0.001$) $F(1, 129) = 99.58$, 95% CI [−2.33, −1.56], $\eta_p^2 = 0.44$. Liberal participants rated the other players as more conservative ($M = 6.19$, $SE = 0.16$) and conservative participants rated the other players as more liberal ($M = 1.57$, $SE = 0.17$; $p < 0.001$) $F(1, 129) = 280.92$, 95% CI [4.07, 5.16].

4.2 | Needs Satisfaction and Anger

As hypothesized, excluded participants reported significantly lower needs satisfaction than included participants (Table 3; $p < 0.001$). Liberals' and conservatives' reported levels of needs satisfaction did not significantly differ ($p = 0.631$), and the interaction was not significant ($p = 0.067$; Supporting Information S1: Table S2) $F(1, 129) = 3.42$, $\eta_p^2 = 0.03$. Examination of means indicated that the effect of exclusion was not moderated by participants' ideology.

Contrary to our hypothesis, excluded (vs. included) participants did not report significantly higher anger ($p = 0.338$). Furthermore, liberals' and conservatives' mean reported levels of anger did not significantly differ ($p = 0.596$), and the interaction was not significant $p = 0.817$, $F(1, 129) = 0.05$, $\eta_p^2 < 0.001$.

4.3 | Outgroup Warmth

Contrary to our hypothesis, excluded participants did not report significantly lower outgroup warmth compared to included participants ($p = 0.330$). Conservatives did report significantly warmer attitudes towards liberals than liberals reported toward conservatives ($p = 0.009$). Again, the exclusion x ideology interaction was not significant, ($p = 0.092$), $F(1, 129) = 2.87$, $\eta_p^2 = 0.02$.

4.4 | Affiliation Interest

As we hypothesized, excluded participants were significantly less interested in affiliating with outgroup players than included participants ($p = 0.047$). Liberals and conservatives did not report significantly different levels of affiliation interest ($p = 0.981$), and the interaction was not significant ($p = 0.543$) $F(1, 129) = 2.34$, $\eta_p^2 = 0.02$.

4.5 | Mediation

Mediation analyses (Table 4) indicated exclusion (vs. inclusion) threatened psychological needs, which subsequently predicted less willingness to affiliate with outgroup members. However, exclusion (vs. inclusion) did not significantly predict higher anger, nor did anger significantly predict affiliation. The bias-corrected 95% CI for the mediated effect of exclusion on affiliation interest through needs satisfaction did not include zero, indicating that the effect of exclusion (vs. inclusion) on affiliation interest was mediated by psychological needs (Figure 1). Supplemental analyses indicated that running the tests of mediation with ideology as a moderator (i.e., Model 7 and/or Model 8 in PROCESS) did not change the findings: for both liberals and conservatives, decreases in psychological needs satisfaction mediated the effect of exclusion on affiliation avoidance.

4.6 | Study 1 Discussion

Study 1 provided evidence that exclusion from a political outgroup affects participants' needs satisfaction and polarization (participants' interest in affiliation with the *political* outgroup). Furthermore, we found support for threatened psychological needs satisfaction as a mediator of the effect of exclusion on

TABLE 2 | Study 1 correlations and descriptive statistics.

	1	2	3	4	5	6	7	8
1. Ideology	—							
2. Exclusion	−0.01	—						
3. Needs Satisfaction	0.11	**−0.53****	—					
4. Anger	0.003	0.15	**−0.22***	—				
5. Outgroup Warmth	**0.44****	−0.07	**0.37****	**−0.24***	—			
6. Affiliation Interest	0.05	**−0.19**	**0.45****	**−0.23***	**0.36****	—		
7. Gender	**−0.43****	0.05	**−0.20***	0.12	**−0.28****	**−0.21**	—	
8. Online	**0.70****	0.13	0.02	0.09	**0.33****	−0.04	**−0.33****	—
M	0.50	0.45	2.49	1.58	4.79	3.37	0.61	0.33
SD	(0.50)	(0.50)	(0.67)	(0.76)	(2.13)	(1.67)	(0.49)	(0.47)
Range	0.1	0.1	1.60–4.25	1.00–4.75	1–11	1–7	0.1	0.1

Note: Boldened correlations $p < 0.05$, *$p < 0.01$, **$p \leq 0.001$ Exclusion 0 = *inclusion*, 1 = *exclusion*; Gender 0 = *man,* 1 = *non-man identifying*; Ideology 0 = *conservative*, 1 = *liberal*; Online 0 = *in-person*, 1 = *online.*

decreased affiliation interest. This study fills a significant gap in knowledge about how *political exclusion* may discourage political affiliation, which is particularly relevant given that *positive* vicarious or imagined political contact can attenuate political outgroup hostility (Wojcieszak and Warner 2020).

We did not find support for the notion that conservatives and liberals would differ in their responses to exclusion. The social-motivational perspective of ideology would expect conservatives (vs. liberals) to have larger effects of exclusion, but interactions did not reach significance. It is possible that the group-based manipulation relying solely on general political ideology (liberal vs. conservative) was weaker, as these groups are less defined. Furthermore, we did not find significant effects with anger or outgroup attitudes, which is contrary to past group-based exclusion research. These null effects could also be explained by the less-defined groups of liberal/conservative, which could induce less anger than more well-defined political social groupings.

Thus, Study 1 was limited by the fact that we defined political groups based on liberal and conservative, which are broad descriptors of political ideology, which could have also accounted for weak and nonsignificant effects. In addition, participants were only recruited from the Washington, D.C. metro area. This area is largely liberal, and thus even the people who identify as conservatives recruited from this area may be more liberal-leaning and more accustomed to being in outgroup situations. In Study 2, we manipulated groups based on stronger political group identities (i.e., supporting a candidate) during a politically charged election, which can also increase salience of political group differences and amplify effects (Iyengar et al. 2019). Study 2 also had a larger, better powered sample. We also recruited participants from both Washington, D.C. and a more conservative area of the US–Texas. By recruiting from these two areas, we were able to capture liberals from a more liberal area of the US, and conservatives from a conservative area of the US. In this way, we attempted to capture more polarized young adults to capture political exclusion's effects.

Furthermore, in Study 1 we only manipulated outgroup political exclusion with no ingroup comparison. We wanted to first examine the potential effects of outgroup political exclusion on polarizing outcomes such as affiliation, particularly given the present state of inter group political animosity in the US. In Study 2, we wanted to expand on the results of Study 1 by examining ingroup exclusion and a different political outcome–antisociality. By manipulating ingroup exclusion and inclusion, we could also examine ingroup exclusion's polarizing effects on group attitudes, affect, or inclinations toward group-based behaviors.

5 | Study 2

We utilized a 2 (*Cyberball*: exclusion vs. inclusion) × 2 (*candidate supported*: Trump vs. Biden) × 2 (*group*: ingroup vs. outgroup) factorial design. Expanding from Study 1, we examined the effects of political exclusion on *antisocial* inclinations with needs-threat and anger as potential mediators. We hypothesized that excluded (vs. included) participants would report: (1) lower needs satisfaction and more anger, and (2) more negative outgroup attitudes and higher antisocial inclinations. We examined the exclusion × group interaction to understand whether the effects of exclusion were contingent on the excluding group, and we also tested whether participants' political group (Trump vs. Biden supporters) moderated the effects of exclusion.

6 | Methods

6.1 | Participants

Young adults in Texas and the Washington, D.C. area granted informed consent and completed an online study on political attitudes between August 2020 and November 1, 2020 (the day before the election). Eligible participants were 18–25, eligible to vote in the 2020 election, and planning to vote for Biden or Trump. We recruited through universities' psychology participant pools and other online sources for Texas and D.C.

TABLE 3 | Study 1 main effects.

Variable	Inclusion $n = 74$ M (SE)	Exclusion $n = 61$ M (SE)	95% CI	$F(1, 129)$	η_p^2	Liberal $n = 68$ M (SE)	Conservative $n = 67$ M (SE)	95% CI	$F(1, 124)$	η_p^2
Needs satisfaction	2.81_a (0.07)	2.10_b (0.07)	[0.52, 0.91]	52.33**	0.29	2.46_a (0.09)	2.45_a (0.09)	[−0.27, 0.30]	0.01	0.91
Anger	1.59_a (0.09)	1.68_a (0.10)	[−0.45, 0.08]	1.90	0.02	1.63_a (0.12)	1.55_a (0.12)	[−0.31, 0.46]	0.15	0.001
Outgroup warmth	4.94_a (0.23)	4.60_a (0.25)	[−0.34, 1.00]	0.96	0.01	4.11_a (0.29)	5.43_b (0.30)	[−2.30, −0.34]	7.11**	0.05
Affiliation interest	3.62_a (0.19)	3.05_b (0.21)	[0.01, 1.14]	4.04*	0.03	3.34_a (0.25)	3.33_a (0.25)	[−0.82, 0.84]	0.001	0.00

Note: Means with different subscripts differ significantly ($p < 0.05$).
*$p < 0.05$; **$p < 0.01$.

participants (e.g., social media, Research Match; $n = 61$). We recruited our sample size based on previous Cyberball studies, with participants randomly assigned to each group: Biden supporters included by the ingroup ($n = 39$), Biden supporters excluded by the ingroup ($n = 44$), Biden supporters included by the outgroup ($n = 45$), Biden supporters excluded by the outgroup ($n = 45$), Trump supporters include by the ingroup ($n = 44$), Trump supporters excluded by the ingroup ($n = 41$), Trump supporters included by the outgroup ($n = 44$), Trump supporters excluded by the outgroup ($n = 41$). Participants received course credit or a $10 gift card.

6.2 | Procedure

The procedure closely mirrored Study 1. After consenting and completing the screening and premanipulation items, participants introduced themselves and wrote a "post" about why they would vote for their preferred candidate (300 characters; Supporting Information S1: Appendix B). Participants then were randomly assigned to read three posts from their ingroup (i.e., same candidate supporters) or outgroup (i.e., opposite candidate supporters). We composed the group posts based on college students' public statements about Biden and Trump (i.e., YouTube, political Facebook groups; Supporting Information S1: Appendix B), which were read and edited by other undergraduate students to ensure believability. Again, these "posts" were designed to mimic the ways people may divulge political views to one another. After participants read the posts, they were randomly assigned exclusion or inclusion in Cyberball, stratified by gender and candidate supported.

6.3 | Precyberball Measures

Participants indicated which presidential candidate they would vote for "if the election were today" (*Donald Trump*, *Joe Biden*; *Third Party Candidate* and *Undecided* were screened out). Voting registration, political ideology, and demographics (recoded gender 0 = *Man/Transman* 1 = *Woman*) replicated Study 1.

6.4 | Postcyberball Measures

The measures for ***needs satisfaction*** ($\alpha = 0.94$; Zadro et al. 2004), ***anger*** ($\alpha = 0.86$), and ***manipulation checks*** (ostracism $r = 0.90$) replicated Study 1.

Participants indicated how warm they felt toward their outgroup (Democrats, liberals, Republicans, conservatives) on a sliding scale from 0 to 100 (Kimel et al. 2017). In addition to warmth, we examined evaluative group attitude measures: rating on a 7-point scale how dishonest/honest, unaggressive/aggressive (reverse scored), unfriendly/friendly, and weak/strong they viewed the outgroup (Kaid 2004). These measures were z-score standardized and averaged for ***outgroup attitudes*** (Trump supporters $\alpha = 0.85$; Biden supporters $\alpha = 0.87$). Higher scores indicated more positive attitudes.

The 2020 election was during a global pandemic, increasing online political engagement (Shah and Grant 2021), and

TABLE 4 | Study 1 mediation.

	Anger					Needs Satisfaction					Affiliation				
Predictor	**Estimate**	***SE***	**95% CI**	***t***	***p***	**Estimate**	***SE***	**95% CI**	***t***	***p***	**Estimate**	***SE***	**95% CI**	***t***	***p***
Constant	**1.30**	**0.16**	**[0.98, 1.62]**	**8.07**	**< 0.001**	**2.92**	**0.12**	**[2.68, 3.16]**	**24.24**	**< 0.001**	1.35	0.82	[−0.27, 2.97]	1.65	0.10
Gender	0.24	0.15	[−0.06, 0.53]	1.60	0.11	**−0.22**	**0.11**	**[−0.44, −0.01]**	**−2.00**	**0.048**	−0.49	0.30	[−1.09, 0.10]	−1.66	0.10
Online	0.25	0.20	[−0.14, 0.63]	1.26	0.21	0.03	0.15	[−0.26, 0.32]	0.18	0.86	−0.40	0.40	[−1.17, 0.39]	−0.99	0.32
Ideology	−0.06	0.19	[−0.44, 0.32]	−0.30	0.76	0.03	0.14	[−0.25, 0.31]	0.21	0.83	0.05	0.38	[−0.70, 0.80]	0.14	0.89
Exclusion	0.19	0.13	[−0.08, 0.45]	1.41	0.16	**−0.70**	**0.10**	**[−0.90, −0.51]**	**−7.08**	**< 0.001**	0.26	0.31	[−0.35, 0.88]	0.85	0.40
Needs satisfaction	—	—	—	—	—	—	—	—	—	—	**1.09**	**0.24**	**[0.62, 1.55]**	**4.63**	**< 0.001**
Anger	—	—	—	—	—	—	—	—	—	—	−0.26	0.18	[−0.61, 0.09]	4.63	0.15
	$R^2 = 0.05$					$\mathbf{R^2 = 0.31}$					$\mathbf{R^2 = 0.24}$				
	$F(4, 130) = ; p = 0.139$					$\mathbf{F(4, 130) = ; p < 0.001}$					$\mathbf{F(6, 128) = ; p < 0.001}$				

Indirect effect of exclusion on antisociality

	Estimate	**Boot *SE***	**Boot LL CI**	**Boot UL CI**
Anger	−0.05	0.05	−0.18	0.03
Needs satisfaction	**−0.76**	**0.21**	**−1.20**	**−0.40**

Note: Significant ($p < 0.05$) effects are boldened.

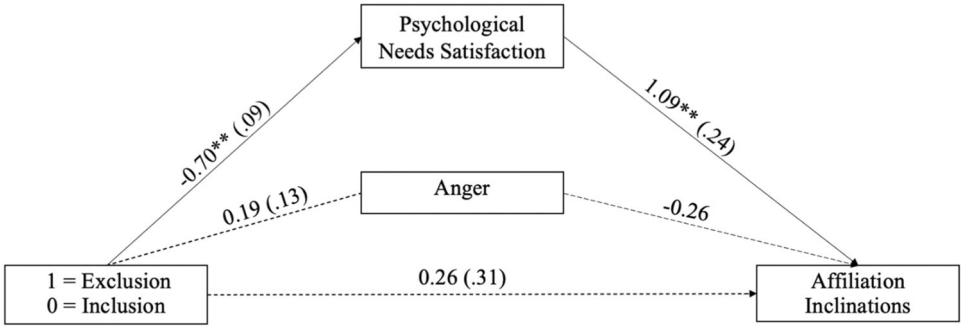

FIGURE 1 | Mediation analyses indicated the effect of exclusion on affiliation inclinations was mediated through threatened psychological needs.

TABLE 5 | Study 2 correlations and descriptive statistics.

	1	2	3	4	5	6	7	8	9
1. Candidate	—								
2. Group	−0.001	—							
3. Exclusion	0.06	0.03	—						
4. Needs Satisfaction	−0.04	**−0.28****	**−0.57****	—					
5. Anger	0.06	**0.16****	**0.20****	**−0.41****	—				
6. Outgroup Attitudes	−0.10	−0.05	0.01	0.004	0.06	—			
7. Antisocial Inclinations	0.10	−0.01	**0.11**	−0.08	**0.22****	**−0.19****	—		
8. Gender	**0.12**	0.01	−0.02	**−0.12**	0.05	**−0.12**	−0.11	—	
9. Age	**−0.33****	**−0.40****	−0.02	**0.22****	**−0.10**	**0.14***	0.05	**−0.16***	—
M	0.51	0.52	0.47	2.56	1.71	−0.50	1.85	0.72	19.09
SD	0.50	0.50	0.50	0.81	0.97	0.66	1.08	0.45	1.68
Range	0.1	0.1	0.1	1.00–4.85	1.00 to 5.00	−2.00 to 1.78	1.00 to 7.00	0.1	18.00 to 25.00

Note: Boldened correlations $p < 0.05$, *$p < 0.01$, **$p \leq 0.001$ Candidate 0 = *Trump* 1 = *Biden*; Exclusion 0 = *inclusion* 1 = *exclusion*; Gender 0 = *man/transman* 1 = *woman*; Group 0 = *ingroup* 1 = *outgroup*.

political exclusion on social media (Anderson et al. 2018). We therefore examined whether exclusion may influence ***online antisocial inclinations***. Participants imagined they were interacting on social media with opposing candidate supporters, and rated how tempted (1 = *not at all tempted* to 7 = *very tempted*) they would be to engage in four behaviors: *insult them*, *humiliate them*, *purposely ignore them*, and *threaten them* ($\alpha = 0.79$; Buckley et al. 2004).

6.5 | Data Preparation and Analytic Plan

As with Study 1, we a-priori decided to remove participants for whom the manipulation was weakened. Of the 368 participants we removed 52: 6 (1.6%) previously participated in a Cyberball study, 4 (1.1%) did not attribute their exclusion to politics, 15 (4.1%) did not pass an attention check, and 27 (7.3%) before debriefing did not believe the Cyberball players were real ($n = 316$). A sensitivity power analysis (G*Power) showed that with this sample ($n = 316$) and an α of 0.05, we had 80% power to detect an effect as small as $\eta_p^2 = 0.024$. Removed participants did not significantly differ in self-reported gender, race, candidate supported, or recruitment location $\chi^2(1) < 3.40$ $ps > 0.090$. Removed participants were, again, more likely to be assigned to the exclusion (vs. inclusion) condition $\chi^2(1) = 9.14$, $p = 0.003$. To examine our primary hypotheses, we conducted 2 (Exclusion; Inclusion vs. Exclusion) × 2 (Group; ingroup vs. outgroup) × 2 (Candidate; Trump vs. Biden) ANCOVAs controlling for gender (Man/Transman vs. Woman) and recruitment source (D.C. university, Texas university, or online). Two-way interactions were the focus of our analyses and are reported here; three-way interactions were not the focus of our study and are not discussed, though we include them in the Supporting Information S1: Table S2; *b*-values are also provided in Supporting Information S1: Table S2. Hayes' PROCESS Macro tested mediation (v4.2; 5,000 samples; Model 4).

7 | Study 2 Results

Table 1 displays demographic information and Table 5 contains bivariate correlations and descriptive statistics. Participants primarily identified as White women (48.73%), were young

($M = 19.09$), and politically active (92.1% registered voters). Men (58.62%) and White participants (59.90%) were more likely to be Trump (vs. Biden) supporters whereas women (54.59%) and nonwhite identifying people (69.75%) were more likely to be Biden (vs. Trump) supporters (gender: $\chi^2(1) = 4.40$, $p = 0.044$; racial group: $\chi^2(1) = 26.38$, $p < 0.001$). Participants recruited from the Texas university and community/social media sources were more likely to be Trump supporters $\chi^2(2) = 96.93$, ($p < 0.001$), whereas participants recruited from the D.C. university were more likely to be Biden supporters. However, recruitment sources were equally likely to be assigned to inclusion or exclusion $\chi^2(2) = 2.11$, ($p = 0.348$).

7.1 | Manipulation Checks

Excluded ($M = 5.92$, $SE = 0.10$) participants felt more excluded than included ($M = 3.72$, $SE = 0.10$, $p < 0.001$) $F(1, 308) = 245.96$, $\eta_p^2 = 0.44$ 95% CI [−2.47, −1.90]. A significant group × candidate interaction illustrated that participants correctly identified the other players' ideology ($p < 0.001$) $F(1, 308) = 0.65$, $\eta_p^2 = 0.77$. Trump ($M = 2.05$, $SE = 0.10$) supporters saw the other players as more liberal than Biden ($M = 6.09$, $SE = 0.10$; 95% CI [−4.33, −3.76]) supporters in outgroup conditions; Trump ($M = 5.57$, $SE = 0.13$) supporters saw ingroup participants as more conservative than Biden ($M = 2.34$, $SE = 0.10$; 95% CI [2.89, 3.57]) supporters in ingroup conditions.

7.2 | Needs Satisfaction and Anger

Means, standard errors, effect sizes, and 95% CIs for main effects of exclusion are reported in Table 6, and for two-way interactions are in Table 7. As hypothesized, excluded participants reported significantly lower needs satisfaction than included participants ($p < 0.001$). The exclusion × group ($p = 0.091$) and exclusion × candidate ($p = 0.053$) interactions did not reach significance.

Furthermore, excluded (vs. included) participants indicated significantly more anger ($p < 0.001$). However the interactions (exclusion × group $p = 0.260$; exclusion × candidate $p = 0.53$) did not approach significance.

7.3 | Outgroup Attitudes

Similar to Study 1, there were no significant main effects of exclusion (vs. inclusion) for outgroup attitudes ($p = 0.554$). However, the exclusion × group interaction was significant ($p = 0.007$; Figure 2). Participants' outgroup attitudes did not significantly differ if they were included versus excluded by the outgroup ($p = 0.086$; 95% CI [−0.03, 0.37]). But when excluded (vs. included) by the ingroup, participants reported significantly more *positive* outgroup attitudes ($p = 0.034$; 95% CI [−0.43, −0.02]).

7.4 | Social Media Antisocial Inclinations

As we hypothesized, excluded (vs. included) participants indicated significantly more social media antisociality ($p = 0.047$).

TABLE 6 | Study 2 main effects.

	Exclusion					Group				Candidate supported				
	Inclusion $n = 166$ M (SE)	**Exclusion $n = 150$ M (SE)**	**95% CI**	**$F(1, 305)$**	**η_p^2**	**Ingroup $n = 151$ M (SE)**	**Outgroup $n = 165$ M (SE)**	**95% CI**	**$F(1, 305)$**	**η_p^2**	**Biden $n = 155$ M (SE)**	**Trump $n = 161$ M (SE)**	**95% CI**	**$F(1, 305)$**	**η_p^2**
Needs satisfaction	**3.04_a (0.05)**	**2.13_b (0.06)**	**[0.77, 1.05]**	**164.87****	**0.35**	**2.76_a (0.06)**	**2.41_b (0.08)**	**[0.12, 0.57]**	**9.21****	**0.03**	2.61_a (0.07)	2.56_a (0.05)	[−0.23, 0.12]	0.35	0.001
Anger	**1.49_a (0.08)**	**1.88_b (0.09)**	**[−0.60, −0.18]**	**13.15****	**0.04**	1.55_a (0.10)	1.81_a (0.12)	[−0.60, 0.07]	2.37	0.01	1.68_a (0.11)	1.68_a (0.08)	[−0.26, 0.27]	0.001	< 0.001
Outgroup attitudes	-0.50_a (0.06)	-0.47_a (0.06)	[−0.17, 0.12]	0.13	0.001	-0.51_a (0.07)	-0.46_a (0.08)	[−0.29, 0.17]	0.26	0.001	-0.42_a (0.05)	- 0.55_a (0.07)	[−0.04, 0.32]	2.22	0.01
Antisocial inclinations	**1.83_a (0.09)**	**2.07_b (0.10)**	**[−0.48, −0.004]**	**3.99***	**0.01**	1.86_a (0.11)	2.04_a (0.13)	[−0.56, 0.19]	0.94	0.003	**2.12_a (0.12)**	**1.77_b (0.09)**	**[−0.65, −0.06]**	**5.48***	**0.02**

Note: Means with different subscripts differ significantly ($p < 0.05$).
*$p < 0.05$; **$p < 0.01$.

TABLE 7 | Study 2 two-way interactions.

	Exclusion × Group interaction						Exclusion × Candidate interaction					
	IG IN $n = 82$ *M* (SE)	IG EX $n = 69$ *M* (SE)	OG IN $n = 84$ *M* (SE)	OG EX $n = 81$ *M* (SE)	$F(1, 305)$	η_p^2	BD IN $n = 80$ *M* (SE)	BD EX $n = 81$ *M* (SE)	TP IN $n = 86$ *M* (SE)	TP EX $n = 69$ *M* (SE)	$F(1, 305)$	η_p^2
Needs satisfaction	3.27_a (0.08)	2.24_b (0.08)	2.81_b (0.09)	2.01_c (0.09)	2.87	0.009	3.14_a (0.09)	2.09_b (0.09)	2.94_a (0.07)	2.17_b (0.08)	3.79	0.01
Anger	1.29_a (0.12)	1.80_b (0.13)	$1.68_{a,b}$ (0.14)	1.95_b (0.14)	1.28	0.004	1.48_a (0.13)	1.88_b (0.12)	1.49_a (0.10)	1.88_b (0.13)	0.003	< 0.001
Outgroup attitudes	**-0.63_a** **(0.08)**	**-0.40_b** **(0.09)**	**-0.37_a** **(0.10)**	**$-0.54_{a,b}$** **(0.10)**	**7.46****	**0.02**	-0.61_a (0.00)	-0.49_a (0.09)	-0.38_b (0.07)	$-0.61_{a,b}$ (0.09)	1.60	0.01
Antisocial inclinations	1.74_a (0.13)	1.97_a (0.14)	1.92_a (0.16)	2.16_a (0.16)	0.001	< 0.001	**2.17_a** **(0.15)**	**2.07_a** **(0.15)**	**1.48_b** **(0.12)**	**2.06_a** **(0.13)**	**7.95***	**0.03**

Note: Means with different subscripts differ significantly ($p < 0.05$); boldened rows indicate a significant ($p < 0.05$) interaction.
Abbreviations: BD, Biden; EX, exclusion; IG, ingroup; IN, inclusion; OG, outgroup; TP, trump.
*$p < 0.05$; **$p < 0.01$.

Interestingly, Biden supporters reported significantly higher antisocial inclinations than Trump supporters ($p = 0.020$). The exclusion × group interaction was not significant ($p = 0.974$), but the exclusion × candidate interaction was ($p = 0.005$; Table 4). Trump (vs. Biden) supporters in the inclusion condition reported significantly lower antisociality ($p < 0.001$, 95% CI [−1.06, −0.32]) though in the exclusion condition they did not significantly differ ($p = 0.95$; 95% CI [−0.40, 0.38]).

7.5 | Mediation

Mediation analyses (Table 8; Figure 3) indicated that, as expected, exclusion (vs. inclusion) predicted more anger and lower needs satisfaction. Anger was a significant positive predictor of antisocial inclinations toward the political outgroup, however needs satisfaction was not a significant predictor of antisocial inclinations. The bias-corrected 95% CI for the effect of exclusion on antisociality through anger did not include zero. However, the 95% CI for psychological needs-threat did include zero; indicating that the effect of exclusion (vs. inclusion) on antisociality was mediated by anger. Supplemental analyses indicated that running the tests of mediation with candidate as a moderator (i.e., Model 7 and/or Model 8 in PROCESS) did not change the results, as the 95% CI for the indices of moderated mediation included zero.

8 | Study 2 and General Discussion

Our studies illustrated that political exclusion (vs. inclusion) threatens psychological needs regardless of whether the participants were excluded based on political ideology (Study 1) or candidate preference (Study 2), or from the ingroup or outgroup (Study 2). We found that exclusion decreased outgroup affiliation willingness mediated by needs-threat in Study 1 and increased social media antisocial inclinations mediated by anger in Study 2. Based on these findings, the polarizing influences were from the primary effects of exclusion on psychological needs and affect; however we did not have evidence that exclusion primarily influenced outgroup attitudes. Thus, it is possible that affect and psychological needs satisfaction–not attitudes–act as primary drivers of group behaviors such as antisociality and affiliation. Our mediation results support theory that exclusion motivates antisociality mediated through anger (Chow et al. 2008), not threatened psychological needs. Whereas decreased desire for affiliation is mediated through threatened psychological needs (Williams and Nida 2011), not anger. These findings have important implications–political exclusion that evokes anger may be dangerous as it makes antisociality more likely. This finding fits with other scholarship on polarization as a positive (e.g., anger) and negative (e.g., avoidance) feedback loop (Axelrod et al. 2021).

Theoretically, following group-based exclusion, individuals should *validate* ingroup identity (feel more negative toward the outgroup) to restore threatened belongingness (Smart Richman and Leary 2009). But we did not find that outgroup exclusion (vs. inclusion) polarized outgroup attitudes in either study. In contrast, *ingroup* exclusion (vs. inclusion) led to significantly more positive outgroup attitudes, acting to *depolarize* outgroup perceptions. This

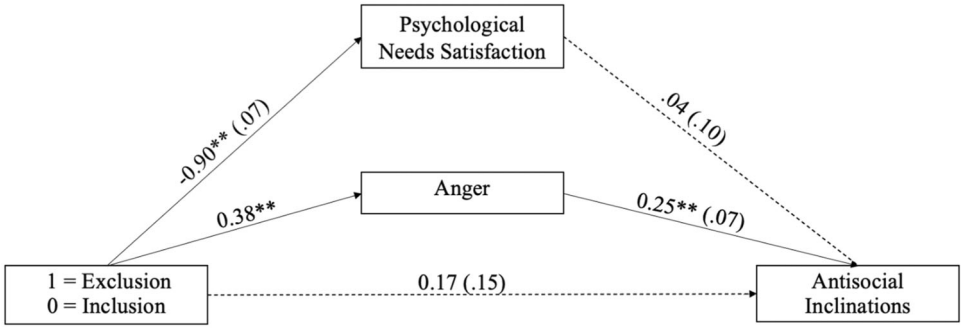

FIGURE 2 | Mediation analyses indicated the effect of exclusion on antisocial inclinations was mediated through increased anger, not threatened psychological needs satisfaction.

could be a "positive" effect of ingroup exclusion, but could come at the expense of ingroup ties. Thus, ingroup exclusion may be particularly important to examine in the context of affective polarization, whereas outgroup exclusion may be more potent for threatened psychological needs, anger, antisociality, and affiliation. Future studies should examine how ingroup and outgroup exclusion may have differing attitudinal effects, and how ingroup exclusion could affect group dynamics.

Interactions in Study 2 did indicate that some effects of exclusion may differ for the two political polarities–in this case Trump and Biden supporters. Trump supporters only reported social media antisocial inclinations as high as Biden supporters after exclusion–when included they had lower antisocial inclinations than Biden supporters. Though we covaried participants' recruitment location (Texas vs. D.C.), this could be an artifact of the two locations as opposed to the two political groups. A potential avenue for future research is understanding how liberals and conservatives' do differ in response to social exclusion, and attempt to understand these within existing frameworks of understanding how ideological differences drive behavior, such as the social-motivational perspective (Jost et al. 2009).

9 | The Cycle of Polarization In 2025

In the US, presidential election cycles have grown increasingly polarized, with high levels of political animosity and inflammatory rhetoric (Rekker 2024), and two attempted assassination attempts on then-candidate Donald Trump (Chang 2024; Rozdilsky 2024). In the 2024 campaign, this included increasing presence of sexism and racism in coverage regarding Kamala Harris' campaign run (Thakur and Finkel 2024). One broader form of political exclusion that Trump supporters may have felt leading up to the 2024 election could be the debunked myths that the election was fraudulent; a lie that was repeatedly fanned by Trump himself and his campaign (Arceneaux and Truex 2023). Though Trump's lies fanned the flames, indeed Democrats engaged in low blows of name calling which may contribute to felt political exclusion (Ciorba 2024; Jacques 2024). And the inflammatory rhetoric and hate speech (Valentino-DeVries and Eder 2022) used by Trump supporters toward their opposition are forms of rejection felt by Democratic supporters. Our conjecture that political exclusion can lead to a cycle of polarization through anger and threatened needs, leading to avoidance and antisociality, is supported by the broader picture of continued polarization in the US, that has increased to the point where, for example, polling shows virtually no remaining attitudinal neutrality on the current president (FiveThirtyEight 2025).

These results are especially important within the context of rising global polarization (Gu and Wang 2022). For example, in Brazil, supporters of ex-president Bolsonaro and current president Lula mirror that of Democrats and Republicans, including dialed-up rhetoric, exclusion, and rejection of the opposing party (Stuenkel 2024). And in Germany, continued anger about immigration, an urban-rural divide, and a rising right-wing faction is creating stormy, angry waters in contrast to the usual "blandness" of the country's politics (Angelos 2024). As a global community, there is deep concern about the continued, widespread trend toward exclusion, rejection, anger, antisociality on the political stage (Levin et al. 2021).

Particularly because animosity is so high between groups, understanding how people could be approached after political exclusion would be useful, and differences between groups' reactions could be key to this understanding. Social identity theory (Tajfel 1974, 1981) highlights the ease in which people who define themselves "as" a political party are more prone to group-based behaviors including social exclusion. One solution could be strategies to reduce the social categorization into specific political factions, and instead focus on commonalities between groups. However, most work on group bias reductions focus solely on attitudes as an outcome (Paluck et al. 2021), which in our study were not critical mediators or outcomes of exclusion. Another potential polarization reduction technique could be mindfulness-based approaches, which centers a state of present-moment awareness and allowing thoughts and sensations to pass without judgment, prior-to or after interacting with the outgroup. In a meta-analysis, mindfulness can improve antibias outcomes, including significant impacts on behavior (Chang et al. 2023). Particularly since other approaches, such as self-affirmation, have resulted in null impacts on political *attitudes* (Lyons et al. 2022), we would urge researchers to consider affect and psychological needs as other potential cognitive to examine in intervention research.

9.1 | Limitations and Future Directions

Our conclusions are limited in generalizability, though we ensured both liberal and conservative young adults were

TABLE 8 | Study 2 mediation.

	Anger					Needs Satisfaction					Antisociality				
Predictor	**Estimate**	***SE***	**95% CI**	***t***	***p***	**Estimate**	***SE***	**95% CI**	***t***	***p***	**Estimate**	***SE***	**95% CI**	***t***	***p***
Constant	**1.27**	**0.23**	**[0.81, 1.72]**	**5.45**	**< 0.001**	**3.23**	**0.16**	**[2.92, 3.53]**	**20.81**	**< 0.001**	**1.11**	**0.44**	**[0.24, 1.98]**	**2.51**	**0.01**
Gender	0.10	0.12	[−0.14, 0.33]	0.80	0.42	**−0.23**	**0.08**	**[−0.38, −0.07]**	**−2.80**	**0.01**	**−0.29**	**0.13**	**[−0.55, −0.02]**	**−2.14**	**0.03**
Location	−0.001	0.09	[−0.18, 0.17]	−0.01	0.99	0.07	0.06	[−0.05, 0.19]	1.19	0.23	0.13	0.10	[−0.06, 0.33]	1.36	0.17
Exclusion	**0.38**	**0.11**	**[0.17, 0.59]**	**3.53**	**< 0.001**	**−0.91**	**0.07**	**[−1.05, −0.77]**	**−12.69**	**< 0.001**	0.17	0.15	[−0.11, 0.46]	1.19	0.23
Group	**0.30**	**0.11**	**[0.09, 0.51]**	**2.78**	**0.01**	**−0.43**	**0.07**	**[−0.57, −0.29]**	**−6.01**	**< 0.001**	−0.09	0.12	[−0.33, 0.16]	−0.68	0.50
Candidate	0.08	0.13	[−0.18, 0.33]	0.59	0.56	0.07	0.09	[−0.10, 0.24]	0.80	0.43	**0.33**	**0.14**	**[0.05, 0.61]**	**2.33**	**0.02**
Needs satisfaction	—	—	—	—	—	—	—	—	—	—	0.04	0.10	[−0.16, 0.24]	0.39	0.70
Anger	—	—	—	—	—	—	—	—	—	—	**0.25**	**0.07**	**[0.12, 0.38]**	**3.70**	**< 0.001**
			$R^2 = 0.07$					**$R^2 = 0.41$**					**$R^2 = 0.09$**		
			$F(5, 310) =; p < 0.001$					**$F(5, 310) =; p < 0.001$**					**$F(7, 308) =; p < .001$**		

Indirect effect of exclusion on antisociality

	Estimate	**Boot *SE***	**Boot LL CI**	**Boot UL CI**
Anger	**0.09**	**0.04**	**0.03**	**0.19**
Needs Satisfaction	−0.04	0.11	−0.23	0.19

Note: Significant effects are boldened.

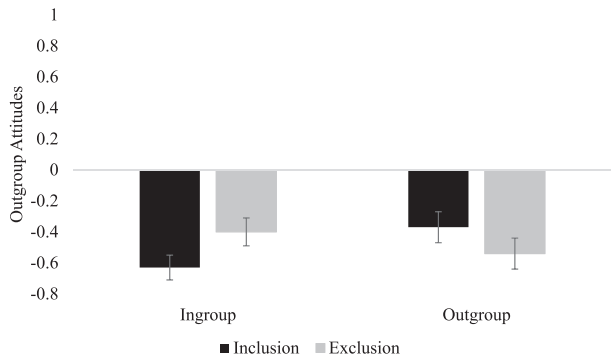

FIGURE 3 | Group × exclusion interaction for outgroup attitudes ($p = 0.005$).

represented. Young adults are only a small proportion of the voting population, though they do carry significant weight in elections. College aged students are an important sample to examine in the context of political polarization, as they vote at increasing rates (Osorio and Michelson 2022), but are just as politically divided as the rest of the population (Murray 2022). But future studies should examine how other populations in the US may react to political exclusion. Though we did control for recruitment location in Study 2, most of the Trump supporters we recruited were from Texas, which could mean that geographical differences (vs. group differences which generalize to all Trump supporters) drive Study 2's comparisons between Trump and Biden supporters. However, several of our Biden supporters were also from Texas, and these geographical differences do in some ways reflect the political divide of the country–Texas is a "solid red state" and D.C. "solid blue." This means our findings may reflect information about the most polarized of the young adults in the US Future studies should examine how other age groups and regions in the US may react to political exclusion, as well as how this could translate to other environments such as social media.

Some research illustrates that when American participants rate political groups, they evaluate the party elites (Druckman and Levendusky 2019). Thus, our results with group attitudes may have only assessed attitudes toward primary party members. We also measured antisociality and affiliation cognitions in ways similar to other studies (Skulborstad 2016), but it is unclear how these cognitions translate into behavior. Future studies should explore how political exclusion affects partisan behaviors. Political exclusion from an outgroup contributes to the rising levels of affective polarization. Within a political context, ostracism from the outgroup can increase the perception that the opposing side views them as less human, called metadehumanization (Bastian and Haslam 2010; Landry et al. 2021). Future research could further consider our findings in the context of metadehumanization, and how metadehumanization influences political behaviors.

Our effect sizes for outcomes other than needs satisfaction were small. This could indicate that political exclusion has only small, immediate influence, however these effects may accumulate to larger effects over time (Stock et al. 2017). Sensitivity power analyses indicated that we were adequately powered to detect small effect sizes, but we still had significant effects with smaller effect sizes than we should have been able to detect with affiliation (Study 1) and the main effect with antisociality (Study 2). Future researchers specifically interested in these outcomes could use our effect sizes to inform studies that are properly powered to detect these effect sizes, and understand the significance of this effect. We also did not examine three-way interactions in Study 2 because they were underpowered and not the focus of our study. Thus, future research into political exclusion should also examine any potential moderation of the effects of ingroup/outgroup exclusion based on political group definitions.

10 | Conclusion

Our study extended the existing literature on group exclusion, showing political exclusion influences antisocial inclinations through anger, and future chances for political intergroup contact through needs satisfaction. We further found that ingroup (vs. outgroup) exclusion may have a complex role in polarization. With increasing interest in bridging the political divide, understanding how exclusion contributes to partisanship can aid in depolarization. Nonpolitical exclusion can make participants high in rejection sensitivity endorse extremist views (Bäck et al. 2018) and partisan false news (Garrett et al. 2020). These effects could be exacerbated by political exclusion. With another election already on the horizon, research should focus on ways to discourage exclusion and attenuate its polarizing effects.

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Conflicts of Interest

The authors declare no conflicts of interest.

Data Availability Statement

The data that support the findings of this study are openly available in Open Science Framework at https://osf.io/7vd3y/?view_only=a0e1c0fbf27d468991b918db082228f0, reference number 10.17605/OSF.IO/7VD3Y.

References

American National Election Studies. 2016. 2016 Time Series Study. https://electionstudies.org/data-center/2016-time-series-study/.

Anderson, M., S. Toor, L. Rainie, and A. Smith. 2018. *Public Attitudes Toward Political Engagement on Social Media*. Pew Research Center. https://www.pewresearch.org/internet/2018/07/11/public-attitudes-toward-political-engagement-on-social-media/.

Angelos, J. 2024. "Germany's Rude Political Awakening." *Politico*, January 29. https://www.politico.eu/article/germany-scholz-afd-politics-economy-merkel/.

Arceneaux, K., and R. Truex. 2023. "Donald Trump and the Lie." *Perspectives on Politics* 21: 863–879. https://doi.org/10.1017/S1537592722000901.

Axelrod, R., J. J. Daymude, and S. Forrest. 2021. "Preventing Extreme Polarization of Political Attitudes." *Proceedings of the National Academy of Sciences* 118, no. 50: e2102139118. https://doi.org/10.1073/pnas.2102139118.

Bäck, E. A., H. Bäck, N. Altermark, and H. Knapton. 2018. "The Quest for Significance: Attitude Adaption to a Radical Group Following Social Exclusion." *International Journal of Developmental Sciences* 12, no. 1–2: 25–36. https://doi.org/10.3233/DEV-170230.

Barnidge, M. 2018. "Social Affect and Political Disagreement on Social Media." *Social Media and Society* 4, no. 3: 1–12. https://doi.org/10.1177/2056305118797721.

Bastian, B., and N. Haslam. 2010. "Excluded From Humanity: The Dehumanizing Effects of Social Ostracism." *Journal of Experimental Social Psychology* 46, no. 1: 107–113. https://doi.org/10.1016/j.jesp.2009.06.022.

Buckley, K. E., R. E. Winkel, and M. R. Leary. 2004. "Reactions to Acceptance and Rejection: Effects of Level and Sequence of Relational Evaluation." *Journal of Experimental Social Psychology* 40, no. 1: 14–28. https://doi.org/10.1016/S0022-1031(03)00064-7.

Buelow, M. T., and J. H. Wirth. 2017. "Decisions in the Face of Known Risks: Ostracism Increases Risky Decision-Making." *Journal of Experimental Social Psychology* 69: 210–217. https://doi.org/10.1016/j.jesp.2016.07.006.

Butters, R., and C. Hare. 2020. "Polarized Networks? New Evidence on American Voters' Political Discussion Networks." *Political Behavior* 44: 1079–1103. https://doi.org/10.1007/s11109-020-09647-w.

Chang, D. F., J. Donald, J. Whitney, I. Y. Miao, and B. Sahdra. 2023. "Does Mindfulness Improve Intergroup Bias, Internalized Bias, and Anti-Bias Outcomes?: A Meta-Analysis of the Evidence and Agenda for Future Research." *Personality and Social Psychology Bulletin* 50, no. 10: 1487–1516. https://doi.org/10.1177/01461672231178518.

Chang, E. 2024. "Timeline of Apparent Assassination Attempt of Donald Trump at Golf Course." *ABC News*, September 16. https://abcnews.go.com/Politics/timeline-apparent-assassination-attempt-donald-trump-golf/story?id=113730494.

Chow, R. M., L. Z. Tiedens, and C. L. Govan. 2008. "Excluded Emotions: The Role of Anger in Antisocial Responses to Ostracism." *Journal of Experimental Social Psychology* 44: 896–903. https://doi.org/10.1016/j.jesp.2007.09.004.

Ciorba, D. 2024. "The Price of Superiority: How the Left's Rhetoric Drives Voters to Trump." *Student Life*, November 13. https://www.studlife.com/forum/2024/11/13/the-price-of-superiority-how-the-lefts-rhetoric-drives-voters-to-trump.

Claessens, S., K. Fischer, A. Chaudhuri, C. G. Sibley, and Q. D. Atkinson. 2020. "The Dual Evolutionary Foundations of Political Ideology." *Nature Human Behaviour* 4, no. 4: 336–345. https://doi.org/10.1038/s41562-020-0850-9.

Clifford, S. 2020. "Compassionate Democrats and Tough Republicans: How Ideology Shapes Partisan Stereotypes." *Political Behavior* 42, no. 4: 1269–1293. https://doi.org/10.1007/s11109-019-09542-z.

Cursan, A., M. J. Bernstein, A. Pascual, and M. L. Félonneau. 2017. "Impact of Gendered Ingroup/Outgroup Ostracism on Women's Academic Performances." *Journal of Social Psychology* 157, no. 3: 338–351. https://doi.org/10.1080/00224545.2016.1215966.

Deane, C., and J. Gramlich. 2020. "2020 Election Reveals Two Broad Voting Coalitions Fundamentally at Odds." *Pew Research Center*. https://www.pewresearch.org/fact-tank/2020/11/06/2020-election-reveals-two-broad-voting-coalitions-fundamentally-at-odds/.

Dimock, M., and J. Gramlich. 2021. "How America Changed During Donald Trump's Presidency." *Pew Research Center*. https://www.pewresearch.org/2021/01/29/how-america-changed-during-donald-trumps-presidency/.

Doherty, C., J. Kiley, and N. Asheer. 2024. "Voters' Feelings About the 2024 Campaign and Election Outcomes; Concerns About Political Violence." *Pew Research Center*. https://www.pewresearch.org/politics/2024/10/10/voters-feelings-about-the-2024-campaign-and-election-outcomes-concerns-about-political-violence/.

Dovidio, J. F., F. M. H. Schellhaas, and A. R. Pearson. 2019. "The Role of Attitudes in Intergroup Relations." In *Handbook of Attitudes, Volume 2: Applications*, edited by D. Albarracin and B. T. Johnson, Vol. 2, 2nd ed., 419–454. Routledge. https://doi.org/10.1017/cbo9780511759154.012.

Druckman, J. N., and M. S. Levendusky. 2019. "What do We Measure When We Measure Affective Polarization?" *Public Opinion Quarterly* 83, no. 1: 114–122. https://doi.org/10.1093/poq/nfz003.

Ellemers, N., and S. A. Haslam. 2012. "Social Identity Theory." In *Handbook of Theories of Social Psychology*, edited by P. A. M. Van Lange, A. W. Kruglanski, and E. T. Higgins, 2, 379–398. SAGE Publications Ltd. https://doi.org/10.4135/9781446249222.

Fayant, M. P., D. Muller, C. Hubertus Joseph Hartgerink, and A. Lantian. 2014. "Is Ostracism by a Despised Outgroup Really Hurtful?: A Replication and Extension of Gonsalkorale and Williams." *Social Psychology* 45, no. 6: 489–494. https://doi.org/10.1027/1864-9335/a000209.

FiveThirtyEight. 2025. Do Americans Have a Favorable or Unfavorable Opinion of Donald Trump? https://projects.fivethirtyeight.com/polls/favorability/donald-trump/.

Garrett, R. K., D. Sude, and P. Riva. 2020. "Toeing the Party Lie: Ostracism Promotes Endorsement of Partisan Election Falsehoods." *Political Communication* 37, no. 2: 157–172. https://doi.org/10.1080/10584609.2019.1666943.

Gaertner, L., J. Iuzzini, and E. M. O'Mara. 2008. "When Rejection by one Fosters Aggression Against Many: Multiple-Victim Aggression as a Consequence of Social Rejection and Perceived Groupness." *Journal of Experimental Social Psychology* 44, no, 4: 958–970. https://doi.org/10.1016/j.jesp.2008.02.004.

Gonsalkorale, K., and K. D. Williams. 2007. "The KKK Won't Let Me Play: Ostracism Even by a Despised Outgroup Hurts." *European Journal of Social Psychology* 37: 1176–1186. https://doi.org/10.1002/ejsp.392.

Goodwin, S. A., K. D. Williams, and A. R. Carter-Sowell. 2010. "The Psychological Sting of Stigma: The Costs of Attributing Ostracism to Racism." *Journal of Experimental Social Psychology* 46, no. 4: 612–618. https://doi.org/10.1016/j.jesp.2010.02.002.

Gu, Y., and Z. Wang. 2022. "Income Inequality and Global Political Polarization: The Economic Origin of Political Polarization in the World." *Journal of Chinese Political Science* 27: 375–398. https://doi.org/10.1007/s11366-021-09772-1.

Hareli, S., S. David, and U. Hess. 2016. "The Role of Emotion Transition for the Perception of Social Dominance and Affiliation." *Cognition and Emotion* 30, no. 7: 1260–1270. https://doi.org/10.1080/02699931.2015.1056107.

Hartgerink, C. H. J., I. Van Beest, J. M. Wicherts, and K. D. Williams. 2015. "The Ordinal Effects of Ostracism: A Meta-Analysis of 120 Cyberball Studies." *PLoS One* 10, no. 5: e0127002. https://doi.org/10.1371/journal.pone.0127002.

Higgins, A. 2024. "Forces on Both Left and Right Battle for Europe's Political Soul." *The New York Times*, July 10. https://www.nytimes.com/2024/07/10/world/europe/france-elections-europe-left-right.html.

Holte, A. J., W. N. Fisher, and F. R. Ferraro. 2022. "Afraid of Social Exclusion: Fear of Missing Out Predicts Cyberball-Induced Ostracism." *Journal of Technology in Behavioral Science* 7, no. 3: 315–324. https://doi.org/10.1007/s41347-022-00251-9.

Iannone, N. E., M. K. McCarty, J. R. Kelly, and K. D. Williams. 2014. "Friends With Each Other but Strangers to You: Source Relationship

Softens Ostracism's Blow." *Group Dynamics: Theory, Research, and Practice* 18, no. 4: 349–356. https://doi.org/10.1037/gdn0000018.

Inskeep, S. 2021. "Democrats, Progressives and Moderates, Are Divided Over Infrastructure Plan." *National Public Radio*, September 23. https://www.npr.org/2021/09/23/1039987448/democrats-progressives-and-moderates-are-divided-over-infrastructure-plan.

Iyengar, S., Y. Lelkes, M. Levendusky, N. Malhotra, and S. J. Westwood. 2019. "The Origins and Consequences of Affective Polarization in the United States." *Annual Review of Political Science* 22: 129–146. https://doi.org/10.1146/annurev-polisci-051117-073034.

Iyengar, S., and S. J. Westwood. 2015. "Fear and Loathing Across Party Lines: New Evidence on Group Polarization." *American Journal of Political Science* 59, no. 3: 690–707. https://doi.org/10.1111/ajps.12152.

Jacques, I. 2024. "Opinion: Biden Calls Trump Supporters 'Garbage.' It Fits Mold of Dems Insulting Opponents." *USA Today*, October 30. https://www.usatoday.com/story/opinion/columnist/2024/10/30/biden-garbage-comment-trump-harris-fascist/75934801007/.

Jost, J. T., and D. M. Amodio. 2012. "Political Ideology as Motivated Social Cognition: Behavioral and Neuroscientific Evidence." *Motivation and Emotion* 36, no. 1: 55–64. https://doi.org/10.1007/s11031-011-9260-7.

Jost, J. T., C. M. Federico, and J. L. Napier. 2009. "Political Ideology: Its Structure, Functions, and Elective Affinities." *Annual Review of Psychology* 60: 307–337. https://doi.org/10.1146/annurev.psych.60.110707.163600.

Jost, J. T., J. Glaser, A. W. Kruglanski, and F. J. Sulloway. 2003. "Political Conservatism as Motivated Social Cognition." *Psychological Bulletin* 129, no. 3: 339–375. https://doi.org/10.1037/0033-2909.129.3.339.

Kaid, L. L. 2004. "Measuring Candidate Images With Semantic Differentials." In *Presidential Candidate Images*, edited by K. L. Hacker, 231–236. Rowman & Littlefield.

Kimel, S. Y., D. Mischkowski, S. Kitayama, and Y. Uchida. 2017. "Culture, Emotions, and the Cold Shoulder: Cultural Differences in the Anger and Sadness Response to Ostracism." *Journal of Cross-Cultural Psychology* 48, no. 9: 1307–1319. https://doi.org/10.1177/0022022117724900.

Landry, A. P., E. Ihm, S. Kwit, and J. W. Schooler. 2021. "Metadehumanization Erodes Democratic Norms During the 2020 Presidential Election." *Analyses of Social Issues and Public Policy* 21, no. 1: 51–63. https://doi.org/10.1111/asap.12253.

Levendusky, M. S., and N. Malhotra. 2016. "(MIS)Perceptions of Partisan Polarization in the American Public." *Public Opinion Quarterly* 80: 378–391. https://doi.org/10.1093/poq/nfv045.

Levin, S. A., H. V. Milner, and C. Perrings. 2021. "The Dynamics of Political Polarization." *Proceedings of the National Academy of Sciences* 118, no. 50: e2116950118. https://doi.org/10.1073/pnas.2116950118.

Lieberman, A. G., M. L. Stock, K. E. AuBuchon, J. B. Beekman, and S. F. Lambert. 2023. "Intersectional Discrimination From Black Women, White Women, Black Men, or White Men Impacts Young Adult Black Women's Affective States and Risky Health Cognitions." *Psychology & Health* 38, no. 1: 1–17. https://doi.org/10.1080/08870446.2021.1941962.

LifeStance Health. 2024. The 2024 Election Cycle's Impact on Mental Health & Relationships. https://cdn.lifestance.com/wp-content/uploads/2024/10/04151054/FINAL_Election_Survey-093024.pdf.

Lyons, B. A., C. E. Farhart, M. P. Hall, et al. 2022. "Self-Affirmation and Identity-Driven Political Behavior." *Journal of Experimental Political Science* 9: 225–240. https://doi.org/10.1017/XPS.2020.46.

MaristPoll. 2024. "2024 Presidential Election." April 3. https://maristpoll.marist.edu/polls/april-2024-presidential-election/.

Mason, L. 2015. "'I Disrespectfully Agree': The Differential Effects of Partisan Sorting on Social and Issue Polarization." *American Journal of Political Science* 59, no. 1: 128–145. https://doi.org/10.1111/ajps.12089.

Mason, L. 2016. "A Cross-Cutting Calm: How Social Sorting Drives Affective Polarization." *Public Opinion Quarterly* 80: 351–377. https://doi.org/10.1093/poq/nfw001.

McCarthy, P., T. Muzergues, and P. Quirk. 2024. "Unloved But Indispensable: Political Parties in Europe." *Atlantic Council*. http://www.jstor.org/stable/resrep62789.

Montague, Z. (2021, May 11). Over 100 Republicans, Including Former Officials, Threaten to Split From the G.O.P. The New York Times. https://www.nytimes.com/2021/05/11/us/politics/republicans-third-party-trump.html.

Murray, M. 2022. "A New Political Divide: Nearly Half of College Students Wouldn't Room With Someone Who Votes Differently." *NBC News*, August 18. https://www.nbcnews.com/meet-the-press/first-read/new-political-divide-nearly-half-college-students-wouldnt-room-someone-rcna43609.

Nathan DeWall, C., J. M. Twenge, B. Bushman, C. Im, and K. Williams. 2010. "A Little Acceptance Goes a Long Way: Applying Social Impact Theory to the Rejection-Aggression Link." *Social Psychological and Personality Science* 1, no. 2: 168–174. https://doi.org/10.1177/1948550610361387.

Olson, A. 2024. *Voters' Views of Their Own Party Shift After 2024 Election*. Dartmouth. https://home.dartmouth.edu/news/2024/12/voters-views-their-own-party-shift-after-2024-election.

Osorio, M. A., and M. R. Michelson. 2022. "College Students Have Been Voting at Record Rates. Why?" *The Washington Post*, August 30. https://www.washingtonpost.com/politics/2022/08/30/college-student-voting-midterms/.

Oxley, D. R., K. B. Smith, J. R. Alford, et al. 2008. "Political Attitudes Vary With Physiological Traits." *Science* 321, no. 5896: 1667–1670. https://doi.org/10.1126/science.1157627.

Paluck, E. L., R. Porat, C. S. Clark, and D. P. Green. 2021. "Prejudice Reduction: Progress and Challenges." *Annual Review of Psychology* 72: 533–560. https://doi.org/10.1146/annurev-psych-071620-030619.

Pinsker, J. 2021. "Trump's Presidency Is Over. So Are Many Relationships." *The Atlantic*, March 30. https://www.theatlantic.com/family/archive/2021/03/trump-friend-family-relationships/618457/.

Reid, T., G. Borter, and M. Martina. 2020. "'You Are no Longer My Mother': A Divided America Will Struggle to Heal After Trump Era." *Reuters*, November. https://www.reuters.com/article/world/india/you-are-no-longer-my-mother-a-divided-america-will-struggle-to-heal-after-tru-idUSKBN27I15T/.

Reiljan, A. 2019. *The Most Polarising Issues in the European Union Party System*, edited by N. Bolin, K. Falasca, M. Grusell, and L. Nord. The Euroflections. https://euandi.eu/en/blog/knowlegde-bites/the-most-polarising-issues-in-the-european-union-party-system.html.

Rekker, R. 2024. "Factual Belief Polarization Between Democrats and Republicans: Source or Epiphenomenon of Ideological and Affective Polarization?" *Frontiers in Political Science* 6: 1254826. https://doi.org/10.3389/fpos.2024.1254826.

Ren, D., E. D. Wesselmann, and I. van Beest. 2020. "Seeking Solitude After Being Ostracized: A Replication and Beyond." *Personality and Social Psychology Bulletin* 47, no. 3: 426–440. https://doi.org/10.1177/0146167220928238.

Rozdilsky, J. L. 2024. "The Second Assassination Attempt on Donald Trump in 64 Days Is a Troubling Turn of Events." *York University News*, September 18. https://www.yorku.ca/news/2024/09/18/the-second-assassination-attempt-on-donald-trump-in-64-days-is-a-troubling-turn-of-events/.

Sacco, D. F., M. J. Bernstein, S. G. Young, and K. Hugenberg. 2014. "Reactions to Social Inclusion and Ostracism as a Function of Perceived

In-Group Similarity." *Group Dynamics: Theory, Research, and Practice* 18, no. 2: 129–137. https://doi.org/10.1037/gdn0000002.

Sarsfield, R., P. Moncagatta, and K. M. Roberts. 2024. "Introduction: The New Polarization in Latin America." *Latin American Politics and Society* 66: 1–23. https://doi.org/10.1017/lap.2024.15.

Schaafsma, J., and K. D. Williams. 2012. "Exclusion, Intergroup Hostility, and Religious Fundamentalism." *Journal of Experimental Social Psychology* 48, no. 4: 829–837. https://doi.org/10.1016/j.jesp.2012.02.015.

Shah, S., and A. Grant. 2021. *Charting Congress on Social Media in the 2016 and 2020 Elections*. Pew Research Center. https://search.issuelab.org/resource/charting-congress-on-social-media-in-the-2016-and-2020-elections.html.

Skulborstad, H. M. 2016. *Responses to Social Rejection: The Role of Relationship Commitment*. Miami University [Dissertation]. https://etd.ohiolink.edu/acprod/odb_etd/ws/send_file/send?accession=miami1467376051&disposition=inline.

Smart Richman, L., and M. R. Leary. 2009. "Reactions to Discrimination, Stigmatization, Ostracism, and Other Forms of Interpersonal Rejection: A Multimotive Model." *Psychological Review* 116, no. 2: 365–383. https://doi.org/10.1037/a0015250.

Smith, J. A., and Z. Jilani. 2024. "What's Driving Political Violence in America?" *Greater Good Magazine*, July 18. https://greatergood.berkeley.edu/article/item/whats_driving_political_violence_in_america.

Smith, T. (2020, October 27). "Dude, I'm done": When Politics Tears Families and Friendships Apart. National Public Radio. Smith, T. 2020. "'Dude, I'm Done': When Politics Tears Families and Friendships Apart." *National Public Radio*, October 27. https://www.npr.org/2020/10/27/928209548/dude-i-m-done-when-politics-tears-families-and-friendships-apart.

Spanovic, M., B. Lickel, T. F. Denson, and N. Petrovic. 2010. "Fear and Anger as Predictors of Motivation for Intergroup Aggression: Evidence From Serbia and Republika Srpska." *Group Processes & Intergroup Relations* 13, no. 6: 725–739. https://doi.org/10.1177/1368430210374483.

Stock, M. L., F. X. Gibbons, L. M. Peterson, and M. Gerrard. 2013. "The Effects of Racial Discrimination on the HIV-Risk Cognitions and Behaviors of Black Adolescents and Young Adults." *Health Psychology* 32, no. 5: 543–550. https://doi.org/10.1037/a0028815.

Stock, M. L., F. X. Gibbons, L. A. Walsh, and M. Gerrard. 2011. "Racial Identification, Racial Discrimination, and Substance Use Vulnerability Among African American Young Adults." *Personality and Social Psychology Bulletin* 37: 1349–1361. https://doi.org/10.1037/a0030149.

Stock, M. L., L. M. Peterson, B. K. Molloy, and S. F. Lambert. 2017. "Past Racial Discrimination Exacerbates the Effects of Racial Exclusion on Negative Affect, Perceived Control, and Alcohol-Risk Cognitions Among Black Young Adults." *Journal of Behavioral Medicine* 40, no. 3: 377–391. https://doi.org/10.1007/s10865-016-9793-z.

Strickler, R. 2018. "Deliberate with the Enemy? Polarization, Social Identity, and Attitudes Toward Disagreement." *Political Research Quarterly* 71, no. 1: 3–18. https://doi.org/10.1177/1065912917721371.

Stuenkel, O. 2024. "Brazil's Polarization Is Here to Stay Even as Politicians Have (Mostly) Dialed Down the Rhetoric." *Americas Quarterly*, March 4. https://www.americasquarterly.org/article/brazils-polarization-is-here-to-stay-even-as-politicians-have-mostly-dialed-down-the-rhetoric/.

Syrjämäki, A. H., and J. K. Hietanen. 2020. "Social Inclusion, but not Exclusion, Delays Attentional Disengagement From Direct Gaze." *Psychological Research* 84, no. 4: 1126–1138. https://doi.org/10.1007/s00426-018-1108-2.

Syrjämäki, A. H., P. Lyyra, M. J. Peltola, and J. K. Hietanen. 2017. "When a Look Is not Enough: No Evidence for Direct Gaze Facilitating Recovery After Social Exclusion." *Social Cognition* 35, no. 6: 601–618. https://doi.org/10.1521/soco.2017.35.6.601.

Tajfel, H. 1974. "Social Identity and Intergroup Behaviour." *Social Science Information* 13, no. 2: 65–93.

Tajfel, H. 1981. "Human Groups and Social Categories: Studies in Social Psychology." *Cambridge University Press*.

Thakur, D., and M. Finkel. 2024. Hated More: Online Violence Targeting Women of Color Candidates in the 2024 US Election. Center for Democracy & Technology and the Ford Institute for Human Security, University of Pittsburgh. https://cdt.org/wp-content/uploads/2024/10/2024-10-02-CDT-Research-Hated-More-brief.pdf.

Twenge, J. M., R. F. Baumeister, D. M. Tice, and T. S. Stucke. 2001. "If You Can't Join Them, Beat Them: Effects of Social Exclusion on Aggressive Behavior." *Journal of Personality and Social Psychology* 81, no. 6: 1058–1069. https://doi.org/10.1037/0022-3514.81.6.1058.

Valentino-DeVries, J., and S. Eder. 2022. "For Trump's Backers in Congress, 'Devil Terms' Help Rally Voters." *The New York Times*, October 22. https://www.nytimes.com/2022/10/22/us/politics/republican-election-objectors-rhetoric.html.

Watson, D., L. A. Clark, and A. Tellegen. 1988. "Development and Validation of Brief Measures of Positive and Negative Affect: The PANAS Scales." *Journal of Personality and Social Psychology* 54, no. 6: 1063–1070. https://doi.org/10.1051/epjconf/201714006017.

Wesselmann, E. D., and K. D. Williams. 2017. "Social Life and Social Death: Inclusion, Ostracism, and Rejection in Groups." *Group Processes & Intergroup Relations* 20, no. 5: 693–706. https://doi.org/10.1177/1368430217708861.

Williams, K. D. 2007. "Ostracism." *Annual Review of Psychology* 58: 425–452. https://doi.org/10.1146/annurev.psych.58.110405.085641.

Williams, K. D., C. K. T. Cheung, and W. Choi. 2000. "Cyberostracism: Effects of Being Ignored Over the Internet." *Journal of Personality and Social Psychology* 79, no. 5: 748–762. https://doi.org/10.1037/0022-3514.79.5.748.

Williams, K. D. 2009. "Ostracism: A Temporal Needs-Threat Model." In *Advances in Experimental Social Psychology*, edited by M. Zanna, 41, 1st ed., 275–314. Academic Press. https://doi.org/10.1016/S0065-2601(08)00406-1.

Williams, K. D., and S. A. Nida. 2011. "Ostracism: Consequences and Coping." *Current Directions in Psychological Science* 20, no. 2: 71–75. https://doi.org/10.1177/0963721411402480.

Wojcieszak, M., and B. R. Warner. 2020. "Can Interparty Contact Reduce Affective Polarization? A Systematic Test of Different Forms of Intergroup Contact." *Political Communication* 37, no. 6: 789–811. https://doi.org/10.1080/10584609.2020.1760406.

Yuhas, A. 2024. "How Polarized Politics Led South Korea to a Plunge Into Martial Law." *The New York Times*, December 3. https://www.nytimes.com/2024/12/03/world/asia/south-korea-yoon-martial-law.html.

Zadro, L., K. D. Williams, and R. Richardson. 2004. "How Low can You go? Ostracism by a Computer Is Sufficient to Lower Self-Reported Levels of Belonging, Control, Self-Esteem, and Meaningful Existence." *Journal of Experimental Social Psychology* 40, no. 4: 560–567. https://doi.org/10.1016/j.jesp.2003.11.006.

Supporting Information

Additional supporting information can be found online in the Supporting Information section.