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4 **Interventions to Reduce Partisan Animosity**

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Abstract

Rising partisan animosity is linked to less support for democracy and more support for political violence. Here we provide a multi-level review of interventions designed to improve partisan animosity, which we define as negative thoughts, feelings, and behaviors towards a political outgroup. We introduce the TRI framework for the three levels of interventions—Thoughts (correcting misconceptions, highlighting commonalities), Relationships (building dialogue skills, fostering positive contact), and Institutions (changing public discourse, transforming political structures)—and connect these levels by highlighting the importance of motivation and mobilization. Our review encompasses both interventions conducted as part of academic research projects, as well as real-world interventions led by practitioners in nonprofit organizations. We also explore the challenges of durability and scalability, examine self-fulfilling polarization and interventions that backfire, and discuss future directions for reducing partisan animosity.

Keywords: political polarization, partisan animosity, affective polarization, intervention science, intergroup relations

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Interventions to Reduce Partisan Animosity

Partisan animosity in America[1–4] undermines our ability to address diverse policy issues such as pandemics[5,6], income inequality[7], and education[8], and may also reduce support for democracy[9] and the peaceful transfer of power[10]. Whereas there are several reviews of the causes and consequences of partisan animosity[1,11–13], there are no reviews of the many interventions[14–30] to reduce it. With millions of dollars invested to reduce partisan animosity across hundreds of organizations and research programs, there is a pressing need for scientific evaluation and synthesis of these interventions. After first defining partisan animosity, discussing the need to reduce it, and outlining its social and psychological mechanisms, we synthesize the interventions that researchers, as well as practitioners in bridge-building organizations, have employed to reduce partisan animosity. We introduce the TRI framework for the three levels of interventions: thoughts, relationships, and institutions. We also discuss ways to motivate people reduce their animosity and mobilize them to effect broader change. Finally, we touch on the durability and scalability of interventions.

Defining Partisan Animosity

Many of the studies we reviewed have used a variant of the polysemous term political polarization, which, broadly, refers to either polarization of ideas or interpersonal polarization. The former is typically referred to as *ideological polarization*[4,31] or *issue polarization*[32], and it reflects disagreement about political issues, policies, or values. This kind of polarization is not negative per se: pluralistic societies have diverse viewpoints, and for democracies to function well, it is helpful for the parties to be easily distinguishable[33]. Interpersonal polarization has, most commonly, been characterized as *affective polarization*[1], which is typically restricted to measures of warmth on a feeling thermometer. Other terms such as *partyism*[34] (hostility and

57 aversion to a political party), *social polarization*[32] (bias, anger, and activism), and *political*
58 *intolerance*[35], (unwillingness to let political opponents express their views), have been used
59 less frequently but often address similar constructs.

60 Recently, the term *political sectarianism*[13] has been introduced. This term refers to
61 “the tendency to adopt a moralized identification with one political group and against another,”
62 and it encompasses three parts: othering (viewing people on the other side as fundamentally
63 different from one’s own group), aversion (disliking and distrusting outgroup members), and
64 moralization (viewing outgroup members as immoral).

65 While we believe political sectarianism captures much of the interpersonal polarization
66 landscape, given its recency and specificity, the empirical studies we review have not used the
67 construct as a variable of interest. For that reason and given the diversity of measures researchers
68 *have* used in this space, we opted for what we see as a broader term: *partisan animosity*. We
69 define partisan animosity as negative thoughts, feelings, or behaviors towards a political
70 outgroup. This term is meant to be all-encompassing, so we can bring together under one
71 umbrella a variety of studies that have focused on affective polarization, partyism, social
72 polarization, political intolerance, and political sectarianism, even if the study authors did not use
73 these specific terms.

74 Finally, the various types of polarization we discussed can occur at two levels: either
75 between/towards people in the general public, or between/towards members of political parties
76 and political elites, with the latter sometimes being referred to as *elite polarization*[36]. Whether
77 participants are aware of the level of polarization they are asked about is a matter of ongoing
78 concern[37]. For our purposes, we are primarily interested in the former—partisan animosity
79 among and toward the public.

Why Reduce Partisan Animosity?

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We believe that partisan animosity—harboring and acting upon negative feelings toward a group of people merely based on their party identity—is, itself, undesirable. But partisan animosity is not only inherently negative; it also leads to bad outcomes for individuals and society.

First, partisan animosity may contribute to the erosion of democracy. Partisan animosity is associated with anti-democratic attitudes[9,38] and support for partisan violence [10], although causality is a matter of contention amongst polarization scholars[9,39–41]. Specifically, animosity may drive partisans to disregard constitutional protections (such as separation of powers, checks and balances, and rejection of authoritarian tendencies) when their side is in power, and support these protections when the opposition rises to power[9]. Further, misperceptions about the other side, which are correlated with partisan animosity, weaken commitment to democratic principles[42]. Similarly, partisan animosity may lead people to reject policies they would have otherwise supported, simply because they originate from the outgroup[43].

In addition to its impact on democratic process, partisan animosity could contribute towards prejudice and discrimination against marginalized groups. Because partisan identity is now strongly tied to demographics such as race, gender, and age[44,45], discriminating on the basis of ideology[46–48] also impacts other identity characteristics[49,50]. Thus, another reason to mitigate partisan animosity is because it leads to reduced demographic diversity. For example, if Republicans exclude Democrats from right-leaning spaces and jobs, they may be excluding people of color, women, and younger people. This can perpetuate systemic inequalities in society.

103 In people's daily lives and in their personal relationships, partisan animosity can lead to
104 heated arguments and loss of trust, respect, and social connection. Family holiday dinners have
105 decreased in duration, which some scholars attribute to political tensions[51]. Perhaps more
106 troubling, people are opting for politically homogenous friendships[52] because associating with
107 political outgroup members is too unpleasant. This can undercut critical social support systems
108 and amplify real world echo chambers where people become increasingly isolated or segregated
109 from others[53].

110 Some argue that the emphasis on reducing partisan animosity is misplaced[54], or even
111 that reducing animosity would inhibit positive social change, since outgroup animosity may duly
112 serve as a motivator for activism[32]. However, activism in a polarized context is likely to be
113 met with limited legislative success, given the state of gridlock fostered by distrust of political
114 opponents[38]. Further, it is possible to vehemently disagree about policy, while still respecting
115 outgroup members' dignity, so the reduction of partisan animosity need not be paired with a
116 reduction in activism.

117 Taken together, these reasons present a strong case for the importance of improving cross
118 partisan relations.

119 **What Causes Partisan Animosity?**

120 Political and psychological scientists have outlined several theoretical frameworks to
121 synthesize the causes of partisan animosity, with proposed causes ranging from individual's
122 thoughts to the institutions that organize our society.

123 At the level of thoughts, partisans hold inaccurate beliefs about their political
124 opponents[14,42,55]. They fail to understand the composition and beliefs of the other side[14,56]
125 and overestimate the extent to which their opponents dehumanize them[42]. Moreover,

126 animosity is rooted in stereotypes that emerge from a feeling that the other side is more
127 threatening than the data suggests[41,57]. Partisans also exhibit cognitive rigidity, making them
128 less receptive to evidence that counters partisan narratives[58,59].

129 At the level of relationships, one commonly discussed cause of animosity and
130 polarization is ideological sorting—i.e., that Democrats are now mostly liberal and Republicans
131 mostly conservative[32]. Relatedly, people’s partisan identities have begun to fuse with other
132 identities such as ideology, race, religion, gender, sexuality, geography, and so on[1,13,60].
133 These “mega-identities” lead to stronger ingroup-outgroup dynamics and animosity toward
134 outgroup members[60].

135 At the level of institutions, the structures of public institutions (e.g., government[1] and
136 social and mass media[61–65]) may amplify stereotypes, making each side seem like a caricature
137 of itself by incentivizing provocative and outrageous rhetoric. These institutions are the
138 platforms for public dialogue, and norms tilt towards hostility.

139 It is likely that the factors mentioned above, as well as many yet-to-be-identified
140 processes, all play a role in inducing and perpetuating partisan animosity, although some of these
141 factors are disputed[66–70], and scholars across disciplines continue to explore the causes of
142 partisan animosity. For our purposes, we refrain from drawing firm conclusions about any
143 particular cause of partisan animosity, and instead focus our attention on the interventions
144 designed to reduce it.

145 **“TRI”ing to Reduce Partisan Animosity: Thoughts, Relationships, and Institutions**

146 There are many promising interventions for reducing partisan animosity, but until now
147 they have not been methodically categorized. Though there are different ways to make sense of
148 the numerous types of interventions, we believe it is useful to categorize them according to the
149 level at which they intervene. Applying the analytical framework of micro, meso, and macro[71]

150 to the context of partisan animosity, and mirroring some of the causes outlined above, the
151 interventions cluster around three broad levels: *thoughts*, *relationships*, and *institutions*. To be
152 sure, these categories are conceptual and non-modular as some interventions may carry spillover
153 effects for multiple levels. For example, interventions that treat an individual partisan’s beliefs
154 may bring partisans into contact with one another, and changes to interpersonal relationships
155 may shape norms in institutions and vice versa. Nevertheless, by categorizing the interventions
156 in this way, we may gain clarity about how to properly scale and implement a given intervention
157 for reducing partisan animosity (a concept we return to in the section: From Science to Lasting
158 Change).

159 Interventions targeting thoughts, beliefs, and attitudes correct misconceptions about the
160 outgroup and highlight commonalities between ingroups and outgroups. At the next level,
161 relationship interventions focus on the way individuals interact with their political opponents in
162 their personal lives. Partisans tend to either refrain from interacting with people on the other
163 side[72], or do so in deleterious ways[73]. Relationship interventions build skills for interacting
164 positively with outgroup members, and bring people together for productive, meaningful contact.
165 Finally, institutional interventions focus on changing the institutions that shape our society, from
166 media to political structures. Interventions at the institutional level target the culture within
167 which partisans are embedded, aiming to instill more positive norms and transform incentives
168 surrounding (in)civility.

169 In each section, we briefly discuss the evidence for animosity as it relates to the level at
170 hand before introducing the various interventions researchers have tested. We also highlight real-
171 world interventions led by practitioners in nonprofit organizations. See Figure 1 for a visual
172 representation of these themes. In the discussion below, we have focused on some of the most

173 promising interventions in each level. See Box 1 for a discussion of interventions that have
174 backfired (i.e., increased partisan animosity).

175 **Intervening on Thoughts**

176 Partisan animosity is partially the thoughts partisans have: some people hold very
177 negative beliefs and feelings about the opposing party. These interventions focus primarily on
178 correcting misconceptions about outgroups and highlighting group commonalities to address the
179 particular misconception that partisans are very different from one another.

180 *Correcting Misconceptions*

181 Political groups develop warped perceptions about each other, incorrectly thinking their
182 opponents possess especially extreme political views (false polarization)[56,74–76], and lack key
183 human traits (dehumanization)[77,78]. Partisans also overestimate how negatively they would
184 feel if they interacted with their opponents[79], and have exaggerated perceptions of how much
185 their opponents dislike and dehumanize them (inaccurate meta-perceptions)[42,80]. These
186 misconceptions may stem from several sources, such as through the influence of political elites,
187 mass media, and social media[81].

188 Correcting misconceptions is challenging in many areas (e.g., debunking online
189 misinformation and conspiracy theories[82]), but some interventions appear to be effective.
190 Researchers have reduced negative partisan attitudes[19,24,40] and support for partisan
191 violence[57] by reducing misperceptions about the prevalence of negative partisan attitudes and
192 support for partisan violence, respectively. Further, Republicans and Democrats overestimate the
193 extent to which the other side dehumanizes them by 50-300%, and presenting corrective
194 information can reduce rates of animosity[42]. Animosity can also be reduced by correcting
195 misperceptions about who is in the outgroup (e.g., only 6% of Democrats are LGBT, not 32%,

196 and only 2% of Republicans earn over \$250K annually, not 38%)[14], correcting misconceptions
197 about how humble the other side is[83], and employing metacognitive training to correct
198 stereotypes[22]. Exposure to opponents' thoughtful arguments and personal experiences can also
199 help transform people's perceptions of how thoughtful or dogmatic the other side
200 is[18,26,84,85]. Some media organizations (e.g. AllSidesⁱ) attempt to correct misconceptions
201 about the other side by exposing partisans to thoughtful representations of alternative political
202 worldviews.

203 Though our focus is specifically on interventions to reduce partisan animosity, we also
204 note that the strategy of correcting misconceptions has successfully changed other political
205 outcomes, such as reducing ideological commitment[25,56,86, cf. ,87]. Recently, scholars have
206 taken a special interest in anti-democratic attitudes[9]. Falsely believing that an opponent is not
207 committed to democratic principles is associated with one's own decreased commitment to said
208 principles[41]. However, to our knowledge, the only study that reduced misperceptions of
209 outgroup members' negative attitudes had no effect on anti-democratic attitudes[40]. More work
210 in this area is urgently needed given the rise in significant threats to democracy in the US and
211 abroad[10,88,89].

212 Correcting misconceptions is a key step in decreasing animosity and can be done
213 relatively simply by presenting more accurate information. One particular misconception is the
214 idea that political opponents are essentially different[90], which we turn to next.

215 ***Highlighting Commonalities***

216 In recent years, partisan identities have become more salient; for example, many dating
217 app users are now more likely to signal their partisan identity to potential matches[91,92]. When
218 the little information that is available about a person relates to partisan identities[93], it can be

219 challenging to discover common ground. Despite recent evidence to the contrary[94], partisans
220 are seen as living increasingly different lives[95]. People tend to see outgroup members as being
221 fundamentally different, whether in their moral beliefs or even their pet preferences[96]. But
222 while some partisan differences in demographics and behaviors do exist[32], partisans have
223 much in common. For example, among Americans in the general public, there is bipartisan
224 support for several key issues, such as bolstering social security, raising taxes on capital gains
225 and dividends, deterring illegal immigration, and more[97]. As with other intergroup conflicts,
226 finding common ground may be a path toward bridging divides[98].

227 Interventions that focus on commonalities either highlight partisans' shared
228 characteristics or reduce the salience of partisan identities. Some researchers use the common
229 ingroup identity model[99,100] as a theoretical basis for emphasizing the American identity that
230 Republicans and Democrats share. While these interventions often reduce negative attitudes in
231 the moment[20,101–103], they may lack durability because people infrequently spontaneously
232 consider broad identities like being American. Conversely, highlighting more community-based
233 identities, like shared sports fandom[102], religious ties[104], or community arts[105] may be
234 more successful in the long term[106], given their salience in daily life.

235 Other scientists have reduced the salience of partisan identity without directly invoking a
236 common ingroup. For example, partisans who engage with political campaign strategy news feel
237 more positively toward the other side[30]. Political strategy news hides the differences between
238 the parties as both parties engage in similar political strategy. Similarly, when partisans learn
239 information about outgroup members that is unrelated to politics, their partisan animosity
240 lessens[93,107,108].

241 One large-scale initiative seeking to increase perceived similarity across the aisle is
242 Public Agenda’s “Hidden Common Ground” initiativeⁱⁱⁱ, which helps Americans recognize the
243 commonalities they share through research, journalism, and public engagement. Recognizing
244 some commonality between partisans may be helpful for fostering cross-cutting relationships.

245 **Intervening on Relationships**

246 In addition to improving people’s thoughts and feelings toward outgroup members, it is
247 important to improve the interactions between partisans. A great deal of research supports the
248 need for four conditions to be met in order for contact to most thoroughly reduce negative
249 outgroup feelings: 1) equal group status within the contact situation; 2) common goals; 3)
250 intergroup cooperation; and 4) the support of authorities, law, or custom[109–111]. A fifth
251 condition, having the potential for friendship with an outgroup member, has also yielded
252 positive results[112]. Synthesizing some of the classic work on contact theory with recent
253 insights from depolarization interventions, we propose two additional conditions that may lead to
254 greater success in the political context. In addition to the four conditions outlined above, it also
255 may be beneficial to 5) include training in dialogue skills[18,113–115], and 6) structure contact
256 interventions to highlight commonalities[29].

257 ***Building Dialogue Skills***

258 Most people fear talking about politics, especially with out-partisans[116–118], so they
259 either avoid these conversations or have them online, where they can caricature and mock those
260 on the other side[119,120]. Political moderates and those who are less polarized (the “exhausted
261 majority”)[121] are most likely to opt out of uncomfortable political conversations. This leaves
262 only the most aggressive and least representative people to debate each other—e.g., “committed
263 conservatives” versus “progressive activists”—creating the perception that people are more

264 polarized than they are (called “false polarization”). It is important for less polarized people to
265 have discussions to minimize social proof of animosity, but they often lack the skills, interest,
266 and confidence to have constructive dialogue across divides[62].

267 Unfortunately, not many interventions focus on preparing participants for dialogue, and
268 some of the ones that do fail to measure direct effects on partisan animosity. Dialogue trainings
269 teach participants to intentionally inquire about their opponents’ viewpoints[122–124], avoid
270 moralizing language[125], focus on their personal experiences[18,84], use balanced
271 pragmatism[115] and signal receptiveness to opposing views[114]. In at least some of these
272 studies, preparing participants for constructive engagement not only made it more productive and
273 enjoyable, but also increased positive perceptions of political opponents [18,84,123]. One useful
274 strategy is to shift intentions away from *persuasion* toward *understanding*[125]. The Listen First
275 Projectⁱⁱⁱ, for example, promotes dialogue skills by helping their affiliates proactively seek to
276 understand the other side rather than preach or proselytize to them. Conversational skills are
277 useful for all dialogues, but especially political discussion. By changing how we talk—and
278 listen—we can better respect our opponents’ views.

279 ***Fostering Positive Contact***

280 Despite partisans sharing interests in common[94], they are physically isolated from each
281 other in many ways: they frequent different restaurants, work in different careers[95], and are
282 less likely to marry each other[126]. The extent to which geographical sorting (political
283 opponents living in politically homogeneous communities) is occurring is a point of contention
284 amongst political scientists[68–70,72,127–130], but more than half of Republicans and
285 Democrats have “just a few” or “no” close friends who are members of the opposing party, and
286 the absence of cross-party friendships is correlated with hatred for the outgroup[29]. Contact

287 theory[109] suggests that providing individuals with opportunities to interact with members of
288 opposing groups may remedy negative animus. Indeed, there is a rich body of literature in social
289 psychology detailing the positive effects that contact has for intergroup relations across barriers
290 related to race[131], ethnicity[132], religion[133], and sexual orientation[134].

291 Researchers have drawn from these insights to create positive and meaningful contact
292 between political opponents, most often through civil conversations, either about political issues
293 or just getting to know each other. Examples include internet forums, workshops, book clubs,
294 and more^{i-ix}. Simple contact between partisans can reduce partisan animosity[23,29,110],
295 however, not all forms of contact are equally conducive to reducing animosity, and some forms
296 of contact may even exacerbate animosity[15] (see Box 1 for backfire effects).

297 Positive intergroup contact can help partisans realize that political divide is narrower than
298 they believe—generating more accurate beliefs[29]. The organization Braver Angels^v does this
299 by hosting discussions between “blues” and “reds”. The discussions focus on policy issues, but
300 also encourage specific forms of dialogue between partisans while highlighting the things they
301 share in common, such as their agreement on many key policy issues[97]. Their work reduces
302 animosity and even increases monetary support for depolarization initiatives[113].

303 **Intervening on Institutions**

304 The broadest level of intervention for reducing partisan animosity is institutional. Current
305 structures and norms of social discourse and government prompt partisan animosity and need to
306 be transformed. Impactful interventions at this level are difficult to implement effectively given
307 their scalability (see the section below on Scalability). Contrary to the previous sections, in
308 which there are numerous studies demonstrating the efficacy of the interventions, the evidence

309 supporting institutional interventions is much sparser. Nonetheless, we discuss the broad kinds of
310 interventions that could possibly yield positive outcomes.

311 *Changing Public Discourse*

312 We consider both social and mass media as primary components of public discourse and
313 touch on the roles that members of the public, political pundits, and elected officials play in
314 shaping public discourse. Public political discourse may play a role in either increasing or
315 reducing partisan animosity, in part because public communication shapes social norms[80,137]
316 about appropriate ways to communicate across divides.

317 In the current political climate, many norms surrounding public discourse about politics
318 tend towards hostility and animosity[80,138]. On social media, where signaling outgroup dislike
319 increases engagement, users are incentivized to increase antagonism, facilitate the spread of
320 misinformation, and stoke both tribalism and moral outrage[120,139–144]. Although some
321 emerging evidence questions the causal relationship between the media and political
322 animosity[66,145], interventions could nonetheless improve the design of social media to create
323 a depolarizing experience for users. Political elites (e.g., politicians and media figures) bear some
324 blame for hostile public discourse, in part because their aggressive and dehumanizing behavior
325 serves as a model for others[9,146,147].

326 Changing public discourse requires reshaping social norms and incentives around
327 polarizing rhetoric. Politicians can model warmth toward one another despite policy
328 differences[16], such as the friendship between Justices Ginsberg and Scalia. Social media
329 platforms could nudge billions of users to be kinder towards the outgroup. This could be
330 accomplished by slowing down people’s ability to reply in anger and highlighting less polarizing
331 content with their news algorithms[62]. However, these solutions would likely result in reduced

332 engagement[120], so there is little incentive for the platforms to implement such measures.
333 Indeed, leaked documents from Facebook provide evidence that the social media company
334 weights “angry” reactions five times as heavily as “likes” in deciding what content to display to
335 users[143]. Users could simply deactivate social media[cf. 145,148], but tech isolationism is
336 difficult in an interconnected world[62]. Alternatively, fine-tuning social media platforms to
337 promote content that receives bipartisan support may incentivize good-faith cross-partisan
338 engagement[62].

339 Mass media can provide powerful social proof to reduce partisan animosity^{x-}
340 ^{xii}[80,149,150] by balancing politically extreme pundits with a more diverse and representative
341 set of perspectives, emphasizing people’s increasing desire to reduce animosity[151,152],
342 highlighting that most Americans are not even interested in politics, let alone
343 polarized[93,121,153], correcting people’s misinformation and exaggerations about the other
344 side[19,24,56,154], and encouraging norms of open mindedness[155]. Unfortunately, media
345 outlets are also incentivized against these measures: they themselves are often strongly polarized,
346 and polarization helps to draw viewers[149]. However, bipartisan and nonpartisan news
347 aggregators^{i,x,xi} offer a promising respite by presenting reasonable positions from across the
348 political spectrum.

349 Changing public discourse is one step toward creating a less polarized environment but
350 its lasting success requires that we transform the political structures that incentivize partisan
351 animosity.

352 ***Transforming Political Structures***

353 To enact lasting change, many have argued that our political system (in the U.S.) needs to
354 change[156,157]. FairVote^{xiii} is an organization doing important work to advocate for structural

355 change that could reduce hyper-partisanship, for example, by advancing ranked-choice voting.
356 Advancing democratic rights, reducing gerrymandering, and campaign finance reform are other
357 structural changes could potentially reduce animosity[157]. Although these structural changes
358 are beyond the scope of this review, we highlight how some of these proposed changes could
359 impact partisan animosity in Box 2.

360 **Connecting the Levels: Motivate and Mobilize**

361 The three intervention levels—reducing animosity at the levels of thoughts, relationships,
362 and institutions—have largely each been studied in isolation. Changing basic cognitions requires
363 different knowledge and tools a than lobbying for large-scale political change, but reducing
364 partisan animosity requires an integrated approach that connects all three levels. It is not enough
365 to just have more accurate perceptions of the other side, or to have a few positive interactions
366 with outgroup members. To implement lasting change, once partisans alter the way they think
367 about their opponents, practitioners must *motivate* them to form relationships with outgroup
368 members. And once they have adopted more civil attitudes, partisans need to be *mobilized* to
369 advocate for institutional change (See Figure 1).

370 **Motivate**

371 Thought-level interventions focus on changing partisan mindsets including correcting
372 negative beliefs about opponents[77,78] and the scale of animosity[42,80]. However, there is a
373 difference between *liking* and *wanting*[158]: feeling more favorably towards a cross-partisan
374 does not automatically translate into enthusiasm about interacting with them. To our knowledge,
375 no research has explored how to motivate civil cross-partisan engagement, but it likely requires
376 more than simply correcting misconceptions and highlighting commonalities. Motivation for

377 behavior change may be increased by focusing on potential benefits[159], in this case rewarding
378 cross-partisan interactions.

379 While social proof[160] can accelerate animosity (a concept we elaborate on in Box 3), it
380 can also motivate people to reduce animosity. People do not want miss out on social trends
381 targeted at improving the common good, as the “ice bucket challenge” for ALS research
382 demonstrates[161]. Perhaps there is an opportunity to create a “reducing animosity” challenge.
383 Further, scientists and practitioners could help create positive social proof by changing the way
384 they talk about their depolarization work[80]. First, they could emphasize shifting norms: more
385 and more people are committed to reducing animosity[151]. False polarization could be another
386 point of emphasis. While a minority of Americans are very affectively polarized, most are not as
387 polarized as many assume, nor strongly interested in politics[93,121]. If the media were to
388 emphasize this lack of polarization (as some have[153]), people may be motivated to conform to
389 this descriptive norm of low partisan animosity.

390 **Mobilize**

391 Researchers and practitioners can reduce animosity by changing individual mindsets,
392 motivating people to engage with opponents, and providing opportunities for positive contact.
393 People can commit to long-term personal change by implementing commitment
394 devices[162,163] and can translate that commitment into action by using if-then plans that
395 specify how to respond to opportunities (e.g., to listen while the opponent is speaking) or
396 obstacles (e.g., staying calm when opponents disparage one’s opinions). However, large-scale
397 impact requires connecting positive interpersonal experiences to broad institutional change. To
398 do so, people need to commit to influencing their social circles and advocating for systemic
399 change. Some organizations, such as Braver Angels^v, have infrastructure set up for expanding

400 their reach, for example by recruiting volunteers to be ambassadors, organizers, and event
401 moderators. We encourage researchers to evaluate similar approaches.

402 Some mobilization efforts identify easy, simple tasks that many people are willing to do,
403 but while these efforts could scale widely, they may not lead to durable change, especially when
404 they scale only within certain social groups. A comprehensively effective mobilization
405 movement would also develop a base of people committed to sustained, effortful action. This
406 could be achieved by giving people responsibility for key outcomes and enmeshing them in an
407 ever-growing network of meaningful relationships with outgroup members[164,165].

408 **From Science to Lasting Change**

409 We note that partisan animosity is a specific example of a broader phenomenon:
410 intergroup prejudice[109]. A recent review of 418 prejudice reduction experiments, including
411 extended and imaginary contact, cognitive and emotional training, social categorization, etc.,
412 found that few studies demonstrated strong evidence of success [166] (political prejudice was
413 excluded from the review). We suspect that some of the same issues those authors raised (e.g.,
414 publication bias, small sample sizes, short-term outcomes) may apply to the studies we discussed
415 as well. Many interventions show promise in controlled, small-scale studies, but the most
416 successful interventions need to be effective (have reliable, large effects), durable (have long-
417 lasting effects), broad (influence partisans across the political spectrum), and scalable (be
418 practically applicable in real-world settings). We describe the science behind two of these
419 elements—durability and scalability—below.

420 **Durability**

421 Durable interventions are long-lasting, continuing to impact behavior even in the chaotic
422 environment of everyday life. One potential predictor of durability is depth of engagement. Just

423 as memorizing new information is helped by experiential learning and personal relevance[167]
424 reductions in animosity may be more durable when they are relatively “deeper.” For example,
425 just reading about one’s own misconceptions[14,19,24,56] may help in the short-term, but may
426 soon creep back in after being re-immersed in partisan media coverage. Conversely,
427 interventions that involve repeated personal (and positive) connections with political opponents
428 are likely more durable. For example, hosting standing dinner parties with outgroup
429 members[168] or joining a longstanding religious group with diverse political viewpoints[169]
430 are likely both relatively durable interventions.

431 Additionally, other work on “wise interventions”[170] shows that lasting treatments act
432 upon desires concordant with human nature like subjective meaning-making. For interventions to
433 be more durable, they should satisfy the three motives that guide meaning making: accuracy,
434 self-integrity, and belongingness. Interventions that guide partisans to arrive at accurate beliefs
435 about their opponents, enhance partisans’ self-integrity, and instill ingroup norms of kindness
436 and civility may sustainably reduce partisan animosity. Importantly, interventions should not tell
437 participants what to think, rather they should encourage internal reflection so that the change will
438 be a result of internal meaning making as opposed to controlling[171].

439 **Scalability**

440 Scalable interventions are able to reach many people while remaining efficacious[172],
441 and can involve tweaks to existing large-scale platforms[15]. For example, Twitter has a highly
442 scalable intervention that asks its millions of users if they would actually like to read an article
443 before sharing[173]. Another example of scalable interventions is “cellular organizations,” where
444 each chapter (or “cell”) is independently organized and quasi-independent yet supported by the
445 broader organizational infrastructure. Cellular organizations include fast-food franchises,

446 sororities, and Alcoholics Anonymous chapters. Bridge USA^{vi} is an example of a cellular
447 organization, because it can be initiated by any group of motivated students at any college.

448 **Durability vs. Scalability**

449 Highly durable interventions may be more difficult to scale, and scalable interventions
450 may not be durable. Small social media tweaks may not foster good will between partisans in
451 heated offline encounters, and transformative personal relationships with cross-partisans may be
452 hard to duplicate across the country—especially without substantial resources. Researchers have
453 tried to create low-cost scalable interventions through vicarious or imagined contact between
454 partisans but their efficacy is unclear[28,29,174]. Positive, semi-structured cross-partisan “in-
455 person” discussions over online platforms (e.g., Zoom) may allow greater scalability while
456 providing adequate durability^{xiv}.

457 **Bridging Research and Practice**

458 Relevant to the tension between durability and scalability, there is a tension between
459 research and practice[175]. Although many scientists and practitioners are committed to
460 understanding partisan animosity, scientists develop novel and theoretically driven interventions
461 that target social or cognitive processes but are typically less interested in scalability or durability
462 in the real world. In contrast, practitioners are interested in creating powerful examples of real-
463 world depolarization that typically prioritize either durability (deploying within a community to
464 stop cycles of violence) or scalability (developing a television program with national reach), but
465 are typically less interested in novelty or measuring the exact process of change.

466 Given the complementary interests of scientists and practitioners, partnerships might be
467 helpful for developing effective interventions. Scientists can help evaluate real-world
468 interventions and identify the “active ingredient” whereas practitioners can tell scientists what

469 actually works “on the ground” with diverse samples and speak to an intervention’s potential for
470 durability and scalability. Challenges to collaboration include different jargon, assumptions, and
471 incentives, but overcoming these challenges is essential to developing and testing strategies that
472 will produce lasting change. Programs like the Strengthening Democracy Challenge^{xv}, which
473 invites researchers and practitioners from all areas and industries to submit interventions for
474 strengthening democracy and reducing partisan animosity, are a step in the right direction.

475 **Concluding Remarks and Future Perspectives**

476 In the quest to develop more effective interventions for reducing partisan animosity, we
477 highlight four considerations for future research: variation, replicability, scope, and
478 interdisciplinarity. See also the Outstanding Questions in Table 1 for future directions tied to the
479 specific intervention themes.

480 **Variation: Tuning Interventions to Audiences, Issues, and Contexts**

481 As no single intervention strategy is likely to reduce polarization for every audience and
482 every issue, an overarching goal for researchers will be to determine *what works, for which*
483 *outcomes, for whom, and under what circumstances*[175,176]. Interventions (*what works*)
484 combine content (the strategy employed) and methods of delivery. Features of intervention
485 delivery include the setting (e.g., home, community center, workplace), mode (e.g., face-to-face,
486 online), format (e.g., workbooks, discussion groups), source (e.g., researcher, community
487 leader), and intensity (e.g., total contact time, number of sessions). Different combinations of
488 content and methods of delivery may be suited to the outcomes we have discussed (correcting
489 misperceptions, highlighting commonalities, building dialogue skills, and fostering positive
490 contact). For instance, a one-shot, online computerized task could correct key misperceptions

491 whereas building dialogue skills might require face-to-face sessions from an expert source over
492 an extended period.

493 Features of the audience (*whom*) that warrant consideration include individual differences
494 in cognitive rigidity[59], moral conviction[177], and curiosity[178], among many others.
495 Democrats and Republicans may also differ in their response to interventions due to dispositional
496 and normative differences between parties[15–17,136]. The effectiveness of interventions may
497 also vary between issues and contexts (*circumstances*). Social issues elicit stronger emotional
498 reactions and are more tied to core religious or moral convictions and group identities than
499 economic issues and are thus liable to lead to more contentious debates [179]. Features of the
500 context such as the point in the electoral cycle[180] or even outdoor temperature[181] could also
501 influence the intensity of initial partisanship and, in turn, the impact of an intervention.

502 Variation in the effectiveness of interventions arising from differences in content, method
503 of delivery, audience, outcome, and circumstances could seem daunting. However, heterogeneity
504 of intervention effects is the norm rather than the exception in behavioral trials[176]. Researchers
505 will need to recognize, from the outset, that many interventions inevitably will fail. By
506 construing variability in effectiveness, not as a limitation of the research, but rather as a route to
507 specifying the parameters that govern when an intervention does not work, researchers can begin
508 to develop a database that can answer the practical question that readily occurs to observers: Will
509 this intervention work for this issue, this sample, and this context?

510 **Replicability and Generalization**

511 Concerns of replicability and generalization should be a priority for researchers,
512 especially as they work with practitioners to implement their interventions. Some promising
513 interventions have failed to replicate[87,103]. In one study, the authors found that asking people

514 to explain complex policies reduced dogmatism[86]. In another, proximity to the 4th of July was
515 associated with less animosity[20]. Potential reasons for the failed replications range from small
516 samples, lack of preregistration, participant exclusion procedures, etc. Additionally, sometimes
517 interventions may fail to replicate because of the ever-changing political landscape, something
518 that could be examined through longitudinal studies. Testing interventions beyond the U.S.[24]
519 may be useful in demonstrating the generalizability of findings. Further, relating to the point
520 above, these failed replications may be alternatively construed as indications of the contexts in
521 which the interventions are and are not effective.

522 **Interdisciplinary Collaboration**

523 So far, the research space on interventions to reduce animosity has been confined to
524 research silos in social and personality psychology, political science, sociology, and
525 communication. In addition to collaborating with organizations on-the-ground (discussed above),
526 researchers could likely draw insights from other academic disciplines that focus on intervention
527 research. For example, researchers in public health, behavioral economics, and education have
528 experience and expertise relevant to changing behavior and norms[182].

529 **Conclusion**

530 Partisan animosity is a growing concern in the U.S., prompting scientists and
531 practitioners to examine its roots and potential solutions. We have attempted to synthesize this
532 rich and quickly growing body of work and acknowledge that there may be other ways to
533 structure this knowledge. Nevertheless, we hope that this review helps to make sense of the
534 variety of interventions and prompts future research in the field. Partisan animosity is powerful,
535 but so is the potential for interdisciplinary work between scientists and practitioners to help
536 overcome it.

Sometimes interventions backfire and end up increasing animosity[15,17,29,183]. We review three themes of backfiring interventions: *stereotype amplification*, *improper preparation*, and *side effects*.

Stereotype Amplification. In a recent Twitter study, participants followed bots that retweeted prominent out-party members, which the authors thought may reduce polarization by breaking down echo chambers. However, rather than reducing polarization, this intervention did the opposite—participants became more entrenched in their views[15]. One explanation for this finding is that prominent out-party members are stereotypically polarized, which confirms the idea that the other side holds very different values and beliefs. Practitioners should avoid exposing participants to extreme stereotypes of outgroups.

Improper Preparation. For interventions to succeed, participants must be prepared for them. For example, for contact to be effective, participants should first recognize the similarities with their opponents and be confident in their dialogue skills. Otherwise contact can fail or even backfire. One study found that when partisans imagined conversing with a political outgroup member, they became more anxious and less empathic, and ultimately more polarized[29]. This effect may have occurred because partisans lacked the dialogue skills and recognition of commonality necessary for engaging with opponents.

Side Effects. Sometimes interventions may reduce some aspects of polarization while creating other problems. For example, priming common identities is generally successful at reducing polarization, but some common identities can have negative side effects. In one study, priming American identity led to negative attitudes toward immigrants[183]. In another, creating a common identity between Republicans and Democrats about mistrust of a foreign power

actually reduced cooperation between them[17]. More broadly, even if interventions can promote civility, they also may inadvertently delegitimize the views on either side[184].

More Investigation Needed

Research on backfiring is limited with only a few published studies[15,17,29,183], possibly because of misaligned incentives to publish positive findings[185]. However, identifying when and why interventions fail would enable practitioners to re-allocate resources away from unhelpful strategies and toward best practices instead.

American political institutions are structured in a way that exacerbates conflict and solidifies gridlock. Political scientists have proposed several changes to these institutions, which, in addition to promoting more efficient governance, may also reduce affective polarization among the electorate. Much of this is speculative and theoretical, as none of these changes have been fully implemented. Importantly, some political scientists are skeptical about their ability to reduce polarization[186–188], so we note them here as food for thought, rather than making definitive claims about the effects of these proposals.

Changes that could reduce polarization:

Multiparty democracy. Having multiple viable parties could encourage cooperation, as interparty coalitions would be a prerequisite for governance. Further, negative campaigning may be a riskier strategy in multiparty systems, because attacking other parties can backfire, damaging not only the party under attack but also the attacking party. If the reputations of both parties are damaged, then, in comparison, a third or fourth party would be more appealing to voters[189].

Open primaries. Open primaries allow independents to vote in primary elections, perhaps lessening the disproportionate sway that more partisan voters have in closed primary systems[190].

Top two primaries. This reform would eliminate party primaries and instead would be a primary of all candidates, where the top two candidates, regardless of party, would advance to the general election. Incentives to focus on base turnout could diminish and instead shift campaign goals towards persuadable voters[190].

Proportional representation systems and ranked choice voting. Contrary to “winner take all” systems, proportional representation systems allow parties to gain seats in proportion to the number of votes cast for them. Ranked choice voting enables voters to select multiple candidates, ranking them on an ordinal scale (1st, 2nd, 3rd, etc.). This procedure could make voting for a third or fourth party less futile[191,192].

Gerrymandering reform. Gerrymandering is the process in which legislators design electoral districts in a manner that is favorable to their own party. This tends to create “safe seats” where certain candidates are virtually guaranteed electoral success. Reforming this system could establish more competitive districts where appealing to non-partisans and providing effective governance would be incentivized[193].

Campaign finance reform. This reform would limit the power of individual donors who tend to support ideologically extreme candidates and incentivize more ideologically heterogeneous candidates to run[194].

Ironically, the more that researchers, public figures, and the media lament the rise of political polarization, the more we may be contributing to the problem.

People on the left and right perceive others as more ideologically extreme than they actually are, which in turn affects the extremity of their own views[56]. Further, Americans hold wildly inaccurate stereotypes about the political outgroup (e.g., overestimating the number of LGBT Democrats or rich Republicans)[14]. These misrepresentations are associated with negative attitudes toward the outgroup. Indeed, *perceived*, as opposed to *actual* ideological polarization may be a stronger driver of negative outgroup attitudes[74].

Shifting to misconceptions about partisan animosity, Americans hold exaggerated beliefs about how negatively their political outgroup feels about their ingroup[19]. This bias leads partisans to believe the outgroup is motivated by the intent to purposefully obstruct various politically relevant scenarios. These findings have been replicated in over 10,000 participants across 26 countries[24].

Why do we observe this process of self-fulfilling polarization? One reason may be that media discussion about extreme polarization communicates descriptive norms to which people tend to conform[80,160]. In other words, hearing about a divided country causes people to believe that is the case, and then follow suit.

Researchers and practitioners studying polarization should be aware of the potential harm they may cause by enhancing perceptions of polarization and identify measures to mitigate these. See the section on highlighting commonalities for more details.

542

543

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Resources

552 i. <https://www.allsides.com>

553 ii. <https://www.publicagenda.org/programs-reports/the-hidden-common-ground-initiative/>

554 iii. <https://www.listenfirstproject.org/>

555 iv. <https://americatalks.us/>

556 v. <https://braverangels.org/>

557 vi. <https://www.bridgeusa.org/>

558 vii. <https://livingroomconversations.org/>

559 viii. <https://narrative4.com/>

560 ix. <https://openmindplatform.org/>

561 x. <https://www.theflipside.io/>

562 xi. <https://ground.news/>

563 xii. <https://apps.bowdoin.edu/media-trades/index.jsp>

564 xiii. <https://www.fairvote.org/>

565 xiv. <https://www.unifyamerica.org/>

566 xv. <https://www.strengtheningdemocracychallenge.org/>

- 568 1 Iyengar, S. *et al.* (2019) The origins and consequences of affective polarization in the
569 United States. *Annu Rev Polit Sci* 22, 129–146
- 570 2 Abramowitz, A. and Saunders, K. (2005) Why can't we all just get along? The reality of a
571 polarized America. *The Forum* 3, 1–22
- 572 3 Campbell, J.E. (2018) *Polarized: Making sense of a divided America*, Princeton University
573 Press.
- 574 4 Fiorina, M.P. and Abrams, S.J. (2008) Political polarization in the American public. *Annu.*
575 *Rev. Polit. Sci.* 11, 563–588
- 576 5 Bavel, J.J.V. *et al.* (2020) Using social and behavioural science to support COVID-19
577 pandemic response. *Nat. Hum. Behav* 4, 460–471
- 578 6 Druckman, J.N. *et al.* (2020) Affective polarization, local contexts and public opinion in
579 America. *Nat. Hum. Behav*
- 580 7 Duca, J.V. and Saving, J.L. (2016) Income inequality and political polarization: Time series
581 evidence over nine decades. *Rev. Income Wealth* 62, 445–466
- 582 8 Houston, D.M. (2019) Polarization and the politics of education: What moves partisan
583 opinion? *KEDI J Educ Policy* 35, 566–589
- 584 9 Kingzette, J. *et al.* (2021) How affective polarization undermines support for democratic
585 norms. *Public Opinion Quarterly* DOI: 10.1093/poq/nfab029
- 586 10 Kalmoe, N.P. and Mason, L. (2019) Lethal mass partisanship: Prevalence, correlates, and
587 electoral contingencies. *National Capital Area Political Science Association American*
588 *Politics Meeting*.
- 589 11 Moore-Berg, S.L. *et al.* (2020) The prime psychological suspects of toxic political
590 polarization. *Curr. Opin. Behav. Sci.* 34, 199–204
- 591 12 Heltzel, G. and Laurin, K. (2020) Polarization in America: Two possible futures. *Curr.*
592 *Opin. Behav. Sci.* 34, 179–184
- 593 13 Finkel, E.J. *et al.* (2020) Political sectarianism in America. *Science* 370, 533–536
- 594 14 Ahler, D.J. and Sood, G. (2018) The parties in our heads: Misperceptions about party
595 composition and their consequences. *J. Politics* 80, 964–981
- 596 15 Bail, C.A. *et al.* (2018) Exposure to opposing views on social media can increase political
597 polarization. *Proc Natl Acad Sci U S A* 115, 9216–9221
- 598 16 Huddy, L. and Yair, O. (2021) Reducing affective polarization: Warm group relations or
599 policy compromise? *Polit Psychol* 42, 291–309
- 600 17 Jahani, E. *et al.* Exposure to common enemies can increase political polarization: Evidence
601 from a cooperation experiment with automated partisans. . (2020)
- 602 18 Kubin, E. *et al.* (2021) Personal experiences bridge moral and political divides better than
603 facts. *Proc Natl Acad Sci USA* 118, e2008389118
- 604 19 Lees, J. and Cikara, M. (2020) Inaccurate group meta-perceptions drive negative out-group
605 attributions in competitive contexts. *Nat. Hum. Behav* 4, 279–286
- 606 20 Levendusky, M.S. (2018) Americans, not partisans: Can priming American national
607 identity reduce affective polarization? *J. Politics* 80, 59–70
- 608 21 Levendusky, M.S. (2018) When efforts to depolarize the electorate fail. *Public Opin Q* 82,
609 583–592

610 22 Reininger, K.M. *et al.* (2020) Targeting our blind spot: A metacognitive intervention
611 ameliorates negative feelings, evaluations, and stereotypes towards conservatives in a
612 liberal sample. *J. Soc. Political Psychol.* 8, 453–472

613 23 Rossiter, E. (2020) *The consequences of interparty conversation on outparty affect and*
614 *stereotypes,*

615 24 Ruggeri, K. *et al.* The general fault in our fault lines. , *Nature Human Behaviour.* (2021)

616 25 Stancato, D.M. and Keltner, D. (2021) Awe, ideological conviction, and perceptions of
617 ideological opponents. *Emotion* 21, 61–72

618 26 Stanley, M.L. *et al.* (2020) Exposure to opposing reasons reduces negative impressions of
619 ideological opponents. *J. Exp. Soc. Psychol* 91, 104030

620 27 Warner, B.R. *et al.* (2020) Reducing political polarization through narrative writing. *J.*
621 *Appl. Commun. Res.* 48, 459–477

622 28 Warner, B.R. and Villamil, A. (2017) A test of imagined contact as a means to improve
623 cross-partisan feelings and reduce attribution of malevolence and acceptance of political
624 violence. *Commun. Monogr.* 84, 447–465

625 29 Wojcieszak, M. and Warner, B.R. (2020) Can interparty contact reduce affective
626 polarization? A systematic test of different forms of intergroup contact. *Polit. Commun.*

627 30 Zoizner, A. *et al.* (2020) Strategy news is good news: How journalistic coverage of politics
628 reduces affective polarization. *Polit. Commun.* DOI: 10.1080/10584609.2020.1829762

629 31 Abramowitz, A.I. and Saunders, K.L. (2006) Exploring the bases of partisanship in the
630 American electorate: Social identity vs. ideology. *Political Res. Q* 59, 175–187

631 32 Mason, L. (2015) “I disrespectfully agree”: The differential effects of partisan sorting on
632 social and issue polarization. *Am J Pol Sci* 59, 128–145

633 33 Lupia, A. (2015) *Uninformed: Why people seem to know so little about politics and what*
634 *we can do about it*, 1st edition. Oxford University Press.

635 34 Sunstein, C.R. (2014) *Partyism*, Social Science Research Network.

636 35 Crawford, J.T. and Pilanski, J.M. (2014) Political intolerance, right and left. *Polit Psychol*
637 35, 841–851

638 36 Skytte, R. (2019) Dimensions of elite partisan polarization: Disentangling the effects of
639 incivility and issue polarization. *Br J Polit Sci*

640 37 Druckman, J.N. and Levendusky, M.S. (2019) What do we measure when we measure
641 affective polarization? *Public Opinion Quarterly* 83, 114–122

642 38 McCoy, J. and Somer, M. (2019) Toward a theory of pernicious polarization and how it
643 harms democracies: Comparative evidence and possible remedies. *Ann Am Acad Pol Soc*
644 *Sci* 681, 234–271

645 39 Broockman, D. *et al.* Does affective polarization undermine democratic norms or
646 accountability? Maybe not. . 22-Dec-(2020) , OSF Preprints

647 40 Voelkel, J.G. *et al.* Interventions reducing affective polarization do not improve anti-
648 democratic attitudes. . 27-May-(2021) , OSF Preprints

649 41 Pasek, M. *et al.* Biased and inaccurate meta-perceptions about out-partisans’ support for
650 democratic principles may erode democratic norms. . 02-Sep-(2021) , PsyArXiv

651 42 Moore-Berg, S.L. *et al.* (2020) Exaggerated meta-perceptions predict intergroup hostility
652 between American political partisans. *Proc Natl Acad Sci USA* 117, 14864–14872

653 43 Cohen, G.L. (2003) Party over policy: The dominating impact of group influence on
654 political beliefs. *Journal of Personality and Social Psychology* 85, 808–822

655 44 Pew Research Center (2020) *In changing U.S. electorate, race and education remain stark*
656 *dividing lines*, Pew Research Center.

657 45 Westwood, S.J. and Peterson, E. (2020) The inseparability of race and partisanship in the
658 united states. *Polit Behav* DOI: 10.1007/s11109-020-09648-9

659 46 Brandt, M.J. *et al.* (2014) The ideological-conflict hypothesis: Intolerance among both
660 liberals and conservatives. *Curr Dir Psychol Sci* 23, 27–34

661 47 Wetherell, G.A. *et al.* (2013) Discrimination across the ideological divide: The role of value
662 violations and abstract values in discrimination by liberals and conservatives. *Social*
663 *Psychological and Personality Science* 4, 658–667

664 48 Crawford, J.T. and Brandt, M.J. (2020) Ideological (a)symmetries in prejudice and
665 intergroup bias. *Current Opinion in Behavioral Sciences* 34, 40–45

666 49 Briscoe, F. and Joshi, A. (2017) Bringing the boss’s politics in: supervisor political
667 ideology and the gender gap in earnings. *Academy of Management Journal* 60, 1415–1441

668 50 Eastwick, P.W. *et al.* (2009) Is love colorblind? Political orientation and interracial
669 romantic desire.

670 51 Chen, M.K. and Rohla, R. (2018) The effect of partisanship and political advertising on
671 close family ties. *Science* 360, 1020–1024

672 52 Poteat, V.P. *et al.* (2011) Can friendships be bipartisan? The effects of political ideology on
673 peer relationships. *Group Processes & Intergroup Relations* 14, 819–834

674 53 Brown, J.R. and Enos, R.D. (2021) The measurement of partisan sorting for 180 million
675 voters. *Nat. Hum. Behav*

676 54 McConnell, W.A. 23-Apr-(2021) , Political polarization is a good thing. , *The Harvard*
677 *Crimson*

678 55 Yudkin, D. *et al.* (2019) *The perception gap: How false impressions are pulling americans*
679 *apart*, PsyArXiv.

680 56 Ahler, D.J. (2014) Self-fulfilling misperceptions of public polarization. *J. Politics* 76, 607–
681 620

682 57 Mernyk, J. *et al.* Correcting inaccurate metaperceptions reduces Americans’ support for
683 partisan violence. . 20-Sep-(2021) , OSF Preprints

684 58 Rollwage, M. *et al.* (2019) What underlies political polarization? A manifesto for
685 computational political psychology. *Trends in Cognitive Sciences* 23, 820–822

686 59 Zmigrod, L. (2020) The role of cognitive rigidity in political ideologies: Theory, evidence,
687 and future directions. *Curr. Opin. Behav. Sci.* 34, 34–39

688 60 Mason, L. (2018) *Uncivil agreement: How politics became our identity*, University Of
689 Chicago Press.

690 61 Berry, J.M. and Sobieraj, S. (2016) *The outrage industry: Political opinion media and the*
691 *new incivility*, Oxford University Press.

692 62 Bail, C.A. (2021) *Breaking the social media prism: How to make our platforms less*
693 *polarizing*, Princeton University Press.

694 63 Kubin, E. and von Sikorski, C. (2021) The role of (social) media in political polarization: A
695 systematic review. *Annals of the International Communication Association* DOI:
696 10.1080/23808985.2021.1976070

697 64 Parker, V.A. *et al.* The ties that blind: Misperceptions of the opponent fringe and the
698 miscalibration of political contempt. . 01-Oct-(2021) , PsyArXiv

699 65 Lorenz-Spreen, P. *et al.* Digital media and democracy: A systematic review of causal and
700 correlational evidence worldwide. . 22-Nov-(2021) , SocArXiv

701 66 Nordbrandt, M. (2021) Affective polarization in the digital age: Testing the direction of the
702 relationship between social media and users' feelings for out-group parties. *New Media &*
703 *Society* DOI: 10.1177/14614448211044393

704 67 Wojcieszak, M. *et al.* (2021) *Null effects of news exposure: A causal test of the*
705 *(un)desirable effects of a 'news vacation' and 'news binging,'* In Review.

706 68 Lang, C. and Pearson-Merkowitz, S. (2015) Partisan sorting in the United States, 1972-
707 2012: New evidence from a dynamic analysis. DOI: 10.1016/J.POLGEO.2014.09.015

708 69 Mummolo, J. and Nall, C. (2017) Why partisans do not sort: The constraints on political
709 segregation. *The Journal of Politics* DOI: 10.1086/687569

710 70 Abrams, S.J. and Fiorina, M.P. (2012) "The big sort" that wasn't: A skeptical
711 reexamination. *PS: Political Science and Politics* 45, 203–210

712 71 van Wijk, J. *et al.* (2019) Social innovation: Integrating micro, meso, and macro level
713 insights from institutional theory. *Business & Society* 58, 887–918

714 72 Gimpel, J.G. and Hui, I. (2015) Seeking politically compatible neighbors? The role of
715 neighborhood partisan composition in residential sorting. DOI:
716 10.1016/J.POLGEO.2014.11.003

717 73 Buliga, E. *et al.* (2021) Friendship and romance across the U.S. political divide: Hindrance
718 or help for outgroup political attitudes? *Journal of Applied Social Psychology* 51, 305–317

719 74 Enders, A.M. and Armaly, M.T. (2019) The differential effects of actual and perceived
720 polarization. *Polit Behav* 41, 815–839

721 75 Westfall, J. *et al.* (2015) Perceiving political polarization in the United States: Party identity
722 strength and attitude extremity exacerbate the perceived partisan divide. *Perspect Psychol*
723 *Sci* 10, 145–158

724 76 Graham, J. *et al.* (2012) The moral stereotypes of liberals and conservatives: Exaggeration
725 of differences across the political spectrum. *PLOS ONE* 7,

726 77 Cassese, E.C. (2019) Partisan dehumanization in American politics. *Polit Behav* 43,

727 78 Martherus, J.L. *et al.* (2019) Party animals? Extreme partisan polarization and
728 dehumanization. *Polit Behav* 43, 517–540

729 79 Dorison, C.A. *et al.* (2019) Selective exposure partly relies on faulty affective forecasts.
730 *Cognition* 188, 98–107

731 80 Peters, U. (2021) How (many) descriptive claims about political polarization exacerbate
732 polarization. *J. Soc. Political Psychol.* 9, 24–36

733 81 Wilson, A.E. *et al.* (2020) Polarization in the contemporary political and media landscape.
734 *Current Opinion in Behavioral Sciences* 34, 223–228

735 82 Ecker, U.K.H. and Ang, L.C. (2019) Political attitudes and the processing of
736 misinformation corrections. *Polit Psychol* 40, 241–260

737 83 Stanley, M.L. *et al.* (2020) Intellectual humility and perceptions of political opponents. *J*
738 *Pers* 88, 1196–1216

739 84 Hagmann, D. *et al.* (2020) *Personal narratives build trust across ideological divides*, Open
740 Science Framework.

741 85 Kalla, J. and Broockman, D. Voter outreach campaigns can reduce affective polarization
742 among implementing political activists. . 18-Jun-(2021) , OSF Preprints

743 86 Fernbach, P.M. *et al.* (2013) Political extremism is supported by an illusion of
744 understanding. *Psychol Sci* 24, 939–946

745 87 Crawford, J.T. and Ruscio, J. (2021) Asking people to explain complex policies does not
746 increase political moderation: Three preregistered failures to closely replicate Fernbach,
747 Rogers, Fox, and Sloman’s (2013) findings. *Psychol Sci*

748 88 Foa, R.S. *et al.* *Global satisfaction with democracy report 2020*, Center for the Future of
749 Democracy.

750 89 Kaufman, R.R. and Haggard, S. (2019) Democratic decline in the United States: What can
751 we learn from middle-income backsliding? *Perspectives on Politics* 17, 417–432

752 90 Wilson, C. (2018) , Political Essentialism and Affective Polarization.

753 91 Easton, M.J. and Holbein, J.B. (2020) The democracy of dating: How political affiliations
754 shape relationship formation. *Journal of Experimental Political Science* DOI:
755 10.1017/XPS.2020.21

756 92 Huber, G.A. and Malhotra, N. (2017) Political homophily in social relationships: Evidence
757 from online dating behavior. *The Journal of Politics* 79, 269–283

758 93 Klar, S. *et al.* (2018) Affective polarization or partisan disdain? Untangling a dislike for the
759 opposing party from a dislike of partisanship. *Public Opin Q* 82, 379–390

760 94 Praet, S. *et al.* (2021) What’s not to like? Facebook page likes reveal limited polarization in
761 lifestyle preferences. *Political Communication* 0, 1–28

762 95 Hetherington, M. and Weiler, J. (2018) *Prius or pickup?: How the answers to four simple
763 questions explain America’s great divide*, Houghton Mifflin Harcourt.

764 96 Denning, K.R. and Hodges, S.D. (2021) When polarization triggers out-group “counter-
765 projection” across the political divide. *Pers Soc Psychol Bull* DOI:
766 10.1177/01461672211021211

767 97 *The common ground of the American people: Policy positions supported by both
768 Democrats and Republicans*, Program for Public Consultation, School of Public Policy,
769 University of Maryland.

770 98 Sherman, D.K. *et al.* (2017) Intergroup conflict and barriers to common ground: A self-
771 affirmation perspective. *Soc. Personal. Psychol. Compass.* 11, e12364

772 99 Gaertner, S.L. *et al.* (1989) Reducing intergroup bias: The benefits of recategorization.
773 *Journal of Personality and Social Psychology* 57, 239–249

774 100 Tajfel, H. *et al.* (1979) An integrative theory of intergroup conflict. In *Organizational
775 identity: A reader*

776 101 Riek, B.M. *et al.* (2010) Does a common ingroup identity reduce intergroup threat? *SAGE
777 Publications* 13, 403–423

778 102 Levendusky, M.S. (2020) , Our common bonds: Using what Americans share to help bridge
779 the partisan divide.

780 103 Brandt, M.J. and Turner-Zwinkels, F.M. (2020) No additional evidence that proximity to
781 the July 4th holiday affects affective polarization. *Collabra Psychol.* 6,

782 104 Putnam, R.D. *et al.* (2012) *American grace: How religion divides and unites us*, Simon and
783 Schuster.

784 105 Gallagher, B. How the arts bring communities together – Venice performing arts center. .
785 (2018)

786 106 Balietti, S. *et al.* ((In Press)) *Reducing opinion polarization through exposure to the views
787 of selected peers*,

788 107 Rogowski, J.C. and Sutherland, J.L. (2016) How ideology fuels affective polarization. *Polit
789 Behav* 38, 485–508

790 108 Kingzette, J. (2021) , Can kindness mitigate partisan animosity? The extent and correlates
791 of partisan prejudice in the american mass public.

792 109 Allport, G.W. (1954) *The Nature of Prejudice*, Addison-Wesley.

793 110 Pettigrew, T.F. and Tropp, L.R. (2011) *When Groups Meet: The Dynamics of Intergroup
794 Contact*, Psychology Press.

795 111 Pettigrew, T.F. and Tropp, L.R. (2006) A meta-analytic test of intergroup contact theory.
796 *Journal of personality and social psychology* 90, 751

797 112 Bagci, S.C. *et al.* (2018) Think beyond contact: Reformulating imagined intergroup contact
798 theory by adding friendship potential. *Group Processes & Intergroup Relations* 21, 1034–
799 1052

800 113 Baron, H. *et al.* Can Americans depolarize? Assessing the effects of reciprocal group
801 reflection on partisan polarization. . 10-May-(2021)

802 114 Yeomans, M. *et al.* (2020) Conversational receptiveness: Improving engagement with
803 opposing views. *Organ. Behav. Hum. Decis. Process.* 160, 131–148

804 115 Puryear, C. and Gray, K. Using “balanced pragmatism” in political discussions increases
805 cross-partisan respect. . 19-Oct-(2021)

806 116 Settle, J.E. and Carlson, T.N. (2019) Opting Out of Political Discussions. *Political
807 Communication* 0, 1–21

808 117 Carlson, T.N. *et al.* (2019) Follow your heart: Could psychophysiology be associated with
809 political discussion network homogeneity? *Polit Psychol* 41, 165–187

810 118 Mutz, D.C. (2002) The consequences of cross-cutting networks for political participation.
811 *American Journal of Political Science*

812 119 Carpenter, J. *et al.* (2021) Political polarization and moral outrage on social media. *Conn
813 Law Review* 52, 1106–1120

814 120 Rathje, S. *et al.* (2021) Out-group animosity drives engagement on social media. *Proc Natl
815 Acad Sci USA* 118,

816 121 Hawkins, S. *et al.* (2019) *Hidden tribes: A study of America’s polarized landscape*,
817 PsyArXiv.

818 122 Kalla, J. and Broockman, D. (2020) *Which narrative strategies durably reduce prejudice?
819 Evidence from field and survey experiments supporting the efficacy of perspective-getting*,
820 Open Science Framework.

821 123 Voelkel, J.G. *et al.* (2021) Inclusion reduces political prejudice. *J. Exp. Soc. Psychol* 95,
822 104149

823 124 Tuller, H.M. *et al.* (2015) Seeing the other side: Perspective taking and the moderation of
824 extremity. *J. Exp. Soc. Psychol* 59, 18–23

825 125 Abeywickrama, R.S. *et al.* (2020) Why moral advocacy leads to polarization and
826 proselytization: The role of self-persuasion. *J. Soc. Polit. Psych.* 8, 2195–3325

827 126 Iyengar, S. *et al.* (2018) The home as a political fortress: Family agreement in an era of
828 polarization. *J. Politics* 80, 1326–1338

829 127 Bishop, B. (2009) *The big sort: Why the clustering of like-minded America is tearing us
830 apart*, Houghton Mifflin Harcourt.

831 128 Mcdonald, I. (2011) Migration and sorting in the American electorate: evidence from the
832 2006 cooperative congressional election study. DOI: 10.1177/1532673X10396303

833 129 Cho, W.K.T. *et al.* (2012) Voter Migration and the Geographic Sorting of the American
834 Electorate. DOI: 10.1080/00045608.2012.720229

- 835 130 Kinsella, C.J. *et al.* (2021) Closely and deeply divided: Purple counties in the 2016
836 presidential election. DOI: 10.1016/J.APGEOG.2021.102386
- 837 131 Kubota, J.T. *et al.* (2017) Intergroup contact throughout the lifespan modulates implicit
838 racial biases across perceivers' racial group. *PLOS ONE* 12, e0180440
- 839 132 Lemmer, G. and Wagner, U. (2015) Can we really reduce ethnic prejudice outside the lab?
840 A meta-analysis of direct and indirect contact interventions. *European Journal of Social
841 Psychology* 45, 152–168
- 842 133 Hewstone, M. and Schmid, K. (2014) Neighbourhood ethnic diversity and orientations
843 toward Muslims in Britain: The role of intergroup contact. *The Political Quarterly* 85, 320–
844 325
- 845 134 MacInnis, C.C. *et al.* (2017) Multilevel intergroup contact and antigay prejudice (explicit
846 and implicit): Evidence of contextual contact benefits in a less visible group domain. *Social
847 Psychological and Personality Science* 8, 243–251
- 848 135 Fishkin, J. *et al.* 20-Aug-(2020) , Is deliberation an antidote to extreme partisan
849 polarization? Reflections on America in one room.
- 850 136 Manbeck, K.E. *et al.* (2018) Improving relations among conservatives and liberals on a
851 college campus: A preliminary trial of a contextual-behavioral intervention. *J Contextual
852 Behav Sci.* 10, 120–125
- 853 137 Cialdini, R.B. *et al.* (1991) A Focus Theory of Normative Conduct: A Theoretical
854 Refinement and Reevaluation of the Role of Norms in Human Behavior. In *Advances in
855 Experimental Social Psychology* 24 (Zanna, M. P., ed), pp. 201–234, Academic Press
- 856 138 Iyengar, S. and Westwood, S.J. (2015) Fear and loathing across party lines: New evidence
857 on group polarization. *Am J Pol Sci* 59, 690–707
- 858 139 Brady, W.J. *et al.* (2020) The MAD model of moral contagion: The role of motivation,
859 attention, and design in the spread of moralized content online. *Psychol Sci* 15, 978–1010
- 860 140 Banks, A. *et al.* (2020) #Polarizedfeeds: Three experiments on polarization, framing, and
861 social media. *Int J Press/Politics* DOI: 10.1177/1940161220940964
- 862 141 Pennycook, G. and Rand, D.G. (2019) Fighting misinformation on social media using
863 crowdsourced judgments of news source quality. *Proc Natl Acad Sci USA* 116, 2521–2526
- 864 142 Harel, T.O. *et al.* (2020) The Normalization of Hatred: Identity, Affective Polarization, and
865 Dehumanization on Facebook in the Context of Intractable Political Conflict. *Social Media
866 + Society* 6, 2056305120913983
- 867 143 Lima, C. 25-Oct-(2021) , A whistleblower's power: Key takeaways from the Facebook
868 Papers. , *Washington Post*
- 869 144 Iyengar, S. and Massey, D.S. (2019) Scientific communication in a post-truth society. *Proc
870 Natl Acad Sci USA* 116, 7656–7661
- 871 145 Wojcieszak, M. *et al.* (2021) *Null effects of news exposure: A causal test of the
872 (un)desirable effects of a 'news vacation' and 'news bingeing,'* In Review.
- 873 146 Zingher, J.N. and Flynn, M.E. (2018) From on high: The effect of elite polarization on mass
874 attitudes and behaviors, 1972–2012. *Br J Polit Sci* 48, 23–45
- 875 147 Banda, K.K. and Cluverius, J. (2018) Elite polarization, party extremity, and affective
876 polarization. *Elect. Stud.* 56, 90–101
- 877 148 Allcott, H. *et al.* (2020) The welfare effects of social media. *Am Econ Rev* 110, 629–676
- 878 149 Levendusky, M. (2013) Partisan media exposure and attitudes toward the opposition. *Polit.
879 Commun.* 30, 565–581

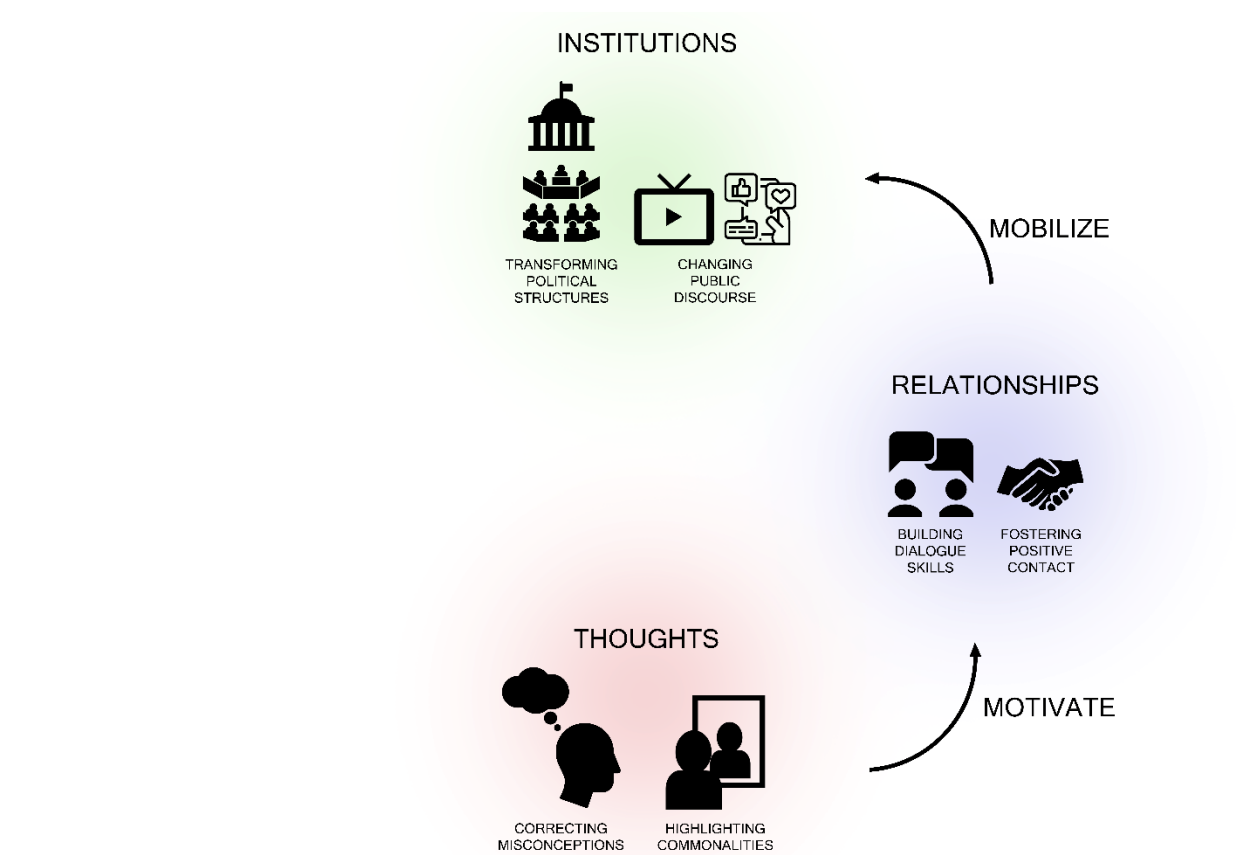
- 880 150 Levendusky, M. and Malhotra, N. (2016) Does media coverage of partisan polarization
881 affect political attitudes? *Polit. Commun.* 33, 283–301
- 882 151 Parker, K. *et al.* Public sees America’s future in decline on many fronts. , *Pew Research*
883 *Center’s Social & Demographic Trends Project.* 21-Mar-(2019)
- 884 152 Mortensen, C.R. *et al.* (2019) Trending norms: A lever for encouraging behaviors
885 performed by the minority. *Soc Psychol Personal Sci* 10, 201–210
- 886 153 Tavernise, S. and Cohn, N. 24-Sep-(2019) , The America that isn’t polarized. , *The New*
887 *York Times*
- 888 154 Levendusky, M.S. and Malhotra, N. (2016) (Mis)perceptions of partisan polarization in the
889 American public. *Public Opin Q* 80, 378–391
- 890 155 Wojcieszak, M. *et al.* (2020) Social norms and selectivity: Effects of norms of open-
891 mindedness on content selection and affective polarization. *Mass Commun. Soc.* 23, 455–
892 483
- 893 156 Persily, N. (2015) *Solutions to political polarization in America*, Cambridge University
894 Press.
- 895 157 Klein, E. (2020) *Why we’re polarized*, Simon and Schuster.
- 896 158 Berridge, K.C. and Robinson, T.E. (2016) Liking, wanting and the incentive-sensitization
897 theory of addiction. *Am Psychol* 71, 670–679
- 898 159 Mollen, S. *et al.* (2017) Short and Sweet: The Persuasive Effects of Message Framing and
899 Temporal Context in Antismoking Warning Labels. *J. Health Commun.* 22, 20–28
- 900 160 Cialdini, R.B. (2006) *Influence: The psychology of persuasion, revised edition*, Revised
901 edition. Harper Business.
- 902 161 Pressgrove, G. *et al.* (2018) What is contagious? Exploring why content goes viral on
903 Twitter: A case study of the ALS Ice Bucket Challenge. *Int. J. Nonprofit Volunt. Sect.*
904 *Mark.* 23, e1586
- 905 162 Rogers, T. *et al.* (2014) Commitment devices: Using initiatives to change behavior. *JAMA*
906 311, 2065
- 907 163 Sheeran, P. *et al.* (2005) The interplay between goal intentions and implementation
908 intentions. *Pers Soc Psychol Bull* 31, 87–98
- 909 164 Han, H. *et al.* (2021) *Prisms of the people*, The University of Chicago Press.
- 910 165 Han, H. (2014) *How organizations develop activists: Civic associations and leadership in*
911 *the 21st century*, 1st edition. Oxford University Press.
- 912 166 Paluck, E.L. *et al.* (2021) Prejudice reduction: Progress and challenges. *Annu. Rev. Psychol.*
913 72, 533–560
- 914 167 DeVoge, S. and Varble, D.L. (1976) The Joint Use of Experimental and Cognitive Learning
915 in the Classroom: Teaching with Personal Relevance. *Teach. Psychol.* 3, 168–171
- 916 168 Paul, S. (2017) , Political Perspectives Are The Main Course At These Dinner Gatherings. ,
917 *NPR.org*. [Online]. Available:
918 [https://www.npr.org/sections/thesalt/2017/03/04/518182530/political-perspectives-are-the-](https://www.npr.org/sections/thesalt/2017/03/04/518182530/political-perspectives-are-the-main-course-at-these-dinner-gatherings)
919 [main-course-at-these-dinner-gatherings.](https://www.npr.org/sections/thesalt/2017/03/04/518182530/political-perspectives-are-the-main-course-at-these-dinner-gatherings) [Accessed: 17-Jun-2021]
- 920 169 Gjelten, T. (2019) , Pastoring A Purple Church: “I Absolutely Bite My Tongue
921 Sometimes.” , *NPR.org*. [Online]. Available:
922 [https://www.npr.org/2019/04/06/703356844/pastoring-a-purple-church-i-absolutely-bite-](https://www.npr.org/2019/04/06/703356844/pastoring-a-purple-church-i-absolutely-bite-my-tongue-sometimes)
923 [my-tongue-sometimes.](https://www.npr.org/2019/04/06/703356844/pastoring-a-purple-church-i-absolutely-bite-my-tongue-sometimes) [Accessed: 17-Jun-2021]
- 924 170 Walton, G.M. and Wilson, T.D. (2018) Wise interventions: Psychological remedies for
925 social and personal problems. *Psychological Review* 125, 617–655

- 926 171 Brehm, J.W. (1966) *A theory of psychological reactance*, Academic Press.
- 927 172 Milat, A.J. *et al.* (2013) The concept of scalability: increasing the scale and potential
928 adoption of health promotion interventions into policy and practice. *Health Promot Int* 28,
929 285–298
- 930 173 Vincent, J. 25-Sep-(2020) , Twitter is bringing its ‘read before you retweet’ prompt to all
931 users. , *The Verge*. [Online]. Available:
932 [https://www.theverge.com/2020/9/25/21455635/twitter-read-before-you-tweet-article-](https://www.theverge.com/2020/9/25/21455635/twitter-read-before-you-tweet-article-prompt-rolling-out-globally-soon)
933 [prompt-rolling-out-globally-soon](https://www.theverge.com/2020/9/25/21455635/twitter-read-before-you-tweet-article-prompt-rolling-out-globally-soon). [Accessed: 17-Jun-2021]
- 934 174 Simonsson, O. *et al.* (2021) Love thy (partisan) neighbor: Brief befriending meditation
935 reduces affective polarization. *SAGE Publications* DOI: 10.1177/13684302211020108
- 936 175 Sheeran, P. *et al.* (2017) Health behavior change: Moving from observation to intervention.
937 *Annu Rev Psychol* 68, 573–600
- 938 176 Rothman, A. and Sheeran, P. (2020) The operating conditions framework: Integrating
939 mechanisms and moderators in health behavior interventions. *Health Psychology* DOI:
940 10.1037/hea0001026
- 941 177 Skitka, L.J. (2010) The psychology of moral conviction. *Social and Personality Psychology*
942 *Compass* 4, 267–281
- 943 178 Kahan, D.M. *et al.* (2017) Science curiosity and political information processing. *Polit*
944 *Psychol* 38, 179–199
- 945 179 Halperin, E. *et al.* (2014) Emotion regulation and the cultivation of political tolerance:
946 Searching for a new track for intervention. *Journal of Conflict Resolution* 58, 1110–1138
- 947 180 Michelitch, K. and Utych, S. (2018) Electoral cycle fluctuations in partisanship: Global
948 evidence from eighty-six countries. *The Journal of Politics* 80, 412–427
- 949 181 Anderson, C.A. (2001) Heat and violence. *Curr Dir Psychol Sci* 10, 33–38
- 950 182 Bandura, A. (1998) Health promotion from the perspective of social cognitive theory.
951 *Psychol Health* 13, 623–649
- 952 183 Wojcieszak, M. and Garrett, R.K. (2018) Social identity, selective exposure, and affective
953 polarization: How priming national identity shapes attitudes toward immigrants via news
954 selection. *Hum Commun Res* 44, 247–273
- 955 184 Spring, V.L. *et al.* (2018) The upside of outrage. *TICS* 22, 1067–1069
- 956 185 Grimes, D.R. *et al.* (2018) Modelling science trustworthiness under publish or perish
957 pressure. *R. Soc. open sci.* 5, 171511
- 958 186 Norrander, B. and Wendland, J. (2016) Open versus closed primaries and the ideological
959 composition of presidential primary electorates. *Elect. Stud.* 42, 229–236
- 960 187 Ahler, D.J. *et al.* (2016) Do open primaries improve representation? An experimental test of
961 California’s 2012 top-two primary. *Legis. Stud. Q.* 41, 237–268
- 962 188 Vliet, L.V. *et al.* (2021) Political systems and political networks: The structure of
963 parliamentarians’ retweet networks in 19 countries. *Int J Commun* 15, 2156–2176
- 964 189 Drutman, L. (2020) *Breaking the two-party doom loop: The case for multiparty Democracy*
965 *in America*, Oxford University Press.
- 966 190 Grose, C.R. (2020) Reducing legislative polarization: Top-two and open primaries are
967 associated with more moderate legislators. *J Polit Econ* 1, 267–287
- 968 191 Nunan, R. (2020) As Maine goes, so goes the nation? Ranked Choice Voting and STV as
969 antidotes to tribal populism. In *Democracy, Populism, and Truth* (Navin, M. C. and Nunan,
970 R., eds), pp. 145–160, Springer International Publishing

971 192 Fischer, S. *et al.* (2021) *Electoral systems and political attitudes: Experimental evidence*,
 972 Social Science Research Network.
 973 193 Dews, F. A primer on gerrymandering and political polarization. , *Brookings*. 06-Jul-(2017)
 974 194 Barber, M.J. (2015) Ideological donors, contribution limits, and the polarization of
 975 American legislatures. *J. Politics* 78, 296–310
 976

977 **Figure 1: Six Themes of Interventions for Reducing Partisan Animosity**

978 Interventions range from Thoughts (correcting misperceptions, highlighting commonalities) to
 979 Relationships (building dialogue skills, fostering positive contact) to Institutions (changing
 980 public discourse and transforming political structures). To transcend between the levels, people
 981 need to be motivated and mobilized, respectively.



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984 **Table 1: Outstanding Questions**

	Intervention Theme	Outstanding Questions
Thoughts	Correcting Misconceptions Improving partisans' knowledge and understanding of their outgroup's attitudes, beliefs, behaviors, and composition	<ul style="list-style-type: none"> ▪ What else besides motives and group composition do people have misconceptions about? ▪ Do these corrections carry more weight coming from an ingroup member, outgroup member, or a neutral observer? ▪ What are the effects of correcting misconceptions about ideological extremity on partisan animosity?
	Highlighting Commonalities Reframing partisan identity to encompass the outgroup	<ul style="list-style-type: none"> ▪ Are there other common ingroup identities that might yield better results? ▪ How can common identities be incorporated into daily life? ▪ Can certain identities be de-politicized by emphasizing common attributes?
Relationships	Building Dialogue Skills Teaching partisans to communicate effectively across political divides	<ul style="list-style-type: none"> ▪ What other dialogue skills are there to reduce partisan animosity in intergroup contact? ▪ Are dialogue skills easier to implement in person or behind a screen?
	Fostering Positive Contact Creating opportunities for partisans to engage with one another	<ul style="list-style-type: none"> ▪ In what context does getting people out of their bubbles work and in what context does it not work (online vs. in person)? ▪ How can we create scalable contact interventions on the internet without it backfiring?
Institutions	Changing Public Discourse Addressing cultural and institutional factors that create hostile and polarizing environments	<ul style="list-style-type: none"> ▪ How can interventions best compete against attention-grabbing narratives that polarize? ▪ How can researchers address partisan animosity without fostering exaggerated perceptions of ideological polarization?

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