

1 **Pain Sensitivity Predicts Support for Moral and Political Views Across the Aisle**

2

3

SUPPLEMENTAL MATERIAL

4

SECTION	PAGE #
SUPPLEMENTAL METHODS AND RESULTS	2–28
<i>Psychophysical Validation of Pain Sensitivity Measure</i>	2–9
<i>Pain Sensitivity Predicts Moral Views (Studies 1a–1c)</i>	9–15
<i>Pain Sensitivity Predicts Political Views (Studies 2a–2b)</i>	15–19
<i>Testing the Process: Perception of Harm (Study 3)</i>	19–23
<i>Lay Intuitions about Pain Sensitivity (Study 4)</i>	23–28
SUPPLEMENTAL TABLES	29–66
SUPPLEMENTAL FIGURES	67–72
SUPPLEMENTAL REFERENCES	73–77

5

SUPPLEMENTAL METHODS AND RESULTS

Following the journal submission guidelines (<https://www.apa.org/pubs/journals/psp?tab=1>),

“For all research articles, authors must include the following information:

- a broad discussion on how the authors sought to maximize power in terms of, for example, sample size, improvement of measures, manipulation checks, and other elements as applicable. A relevant segment of the paper must be highlighted in yellow.”

Psychophysical Validation of Pain Sensitivity Measure

Method

All data, analysis code, and research materials are available at

https://osf.io/mgcef/?view_only=ed0786335fdc41a39ea4b7a1c9c2e444. The study had received institutional ethics approval and was executed in compliance with relevant ethical guidelines and APA ethical standards, including adherence to the legal requirements of the study country.

Participants

Undergraduate students at a large university in North America were recruited to complete a lab study for course credits. Our data collection targeted a sample size of at least 200 participants with useable data. It proceeded from the beginning to the end of an academic term. In total, 263 participants ($M_{age} = 19.15$, $SD_{age} = 1.96$) completed the study, provided reconsent (7 others did not), and passed the attention check (10 others did not) and problematic response patterns check. Most participants indicated their gender as “female” ($n = 153$) or “male” ($n = 108$), and 2 indicated “other” ($n = 2$).

29 **Equipment, Procedure, and Measures**

30 Pain was induced using a pressure algometer (Model FDX 50, Wager Instruments,
31 Greenwich, CT; [http://www.wagnerinstruments.com/products/force-gages/digital-force-](http://www.wagnerinstruments.com/products/force-gages/digital-force-gages/force-ten-fdx)
32 [gages/force-ten-fdx](http://www.wagnerinstruments.com/products/force-gages/digital-force-gages/force-ten-fdx)). Prior work has shown that pressure algometers provide high levels of
33 reliability and validity in force application and pressure-pain assessment (Kinser et al., 2009).
34 We used the algometer to apply pressure on fingers, a body region chosen for ease of access and
35 in accordance with established experimental procedures (Brennum et al., 1989). We oriented the
36 algometer in such a way that participants could place their finger in a comfortable position but
37 could not see the screen displaying the objective pressure amount (Figure S2).

38 Data collection took place one participant at a time. Upon arrival at the lab and after
39 providing consent, the participant was reminded that they could terminate their participation at
40 any point. The first part of the study assessed pain threshold and pain tolerance. Experimenter 1
41 asked the participant to position the index finger of their non-dominant hand such that the
42 midpoint of the middle phalanx (between the first and second knuckles) was right underneath the
43 rubber-tipped load shaft of the algometer.

44 To assess pain threshold, the participant was told that Experimenter 1 would apply
45 pressure to their finger and was asked to inform Experimenter 1 when they started feeling pain
46 (not when they started feeling touch). Experimenter 1 asked the participant to look away from
47 their finger and then started tightening the screw slowly and continuously to increase the
48 pressure exerted by the algometer. When the participant reported starting to feel pain,
49 Experimenter 2 wrote down the objective pressure amount displayed on the algometer.

50 Next, to assess pain tolerance, the participant was told that Experimenter 1 would
51 increase the pressure applied to their finger and was asked to inform Experimenter 1 when they

52 reached the maximum amount of pain they could tolerate. Experimenter 1 started tightening the
53 screw slowly and continuously to increase the amount of pressure exerted by the algometer.
54 When the participant reported feeling the maximum amount of pain they could tolerate,
55 Experimenter 2 wrote down the objective pressure amount displayed on the algometer.
56 Experimenter 1 loosened the screw all the way for the participant to remove their index finger
57 from the algometer. This concluded the first part of the study.

58 The second part of the study assessed changes in subjective intensity of pain experience
59 in response to increases in objective amount of physical pressure. After reminding the participant
60 that they could withdraw from the study at any time, Experimenter 1 told them that increasing
61 pressure would be applied to the middle finger (as opposed to the index finger in the first part of
62 the study) of their non-dominant hand and that with each pressure increment, they would
63 verbally rate their pain intensity on a scale of 0 to 100, with 0 being no pain at all and 100 being
64 the maximum amount of pain.

65 Experimenter 1 asked the participant to position the middle finger of their non-dominant
66 hand such that the midpoint of the middle phalanx (between the first and second knuckles) was
67 right underneath the rubber-tipped load shaft of the algometer. Experimenter 1 began by
68 tightening the screw to reach the objective pressure amount at which the participant started
69 feeling pain in the first part of the study. Experimenter 1 asked the participant to rate their pain
70 intensity. Experimenter 2 wrote down the subjective pain intensity rated by the participant and
71 the objective pressure amount displayed on the algometer.

72 Experimenter 1 tightened the screw of the algometer to increase its exerted pressure by
73 ~10 ozf and asked the participant to rate their pain intensity. Experimenter 2 wrote down the
74 subjective pain intensity and the objective pressure amount. This cycle was repeated until one of

75 the following criteria was met: (1) the objective pressure amount reached 500 ozf, (2) the
76 participant rated their pain intensity at 100, or (3) the participant opted to withdraw from the
77 study. Criterion 1 was met for 3 participants, criterion 2 for 229 participants, and criterion 3 for
78 31 participants. Afterwards, Experimenter 1 loosened the screw all the way for the participant to
79 remove their middle finger from the algometer. This concluded the second part of the study.

80 Recall that throughout the psychophysical assessment, the algometer was always oriented
81 in such a way that the participant could not see the screen displaying the objective pressure
82 amount (Figure S2). The participant was never informed of the objective pressure amount in any
83 part of the study. That means the participant was only aware of their subjective experience,
84 including the experience of starting to feel pain, the experience of feeling the maximum amount
85 of pain they could tolerate, and the experience of feeling higher intensities of pain with pressure
86 increments. All participants had these subjective experiences without knowing the corresponding
87 objective pressure amounts.

88 After the psychophysical assessment, Experimenter 2 escorted the participant to a
89 different room and asked them to complete an online survey that included the Pain Sensitivity
90 Questionnaire (Ruscheweyh et al., 2009, 2012; Sellers et al., 2013), attention check,
91 demographic measures, debriefing, and re-consent. The PSQ included 14 items (plus three fillers)
92 that measured the extent to which the participant found an imagined situation painful (e.g., “You
93 grazed your knee falling off your bicycle”) on a 11-point scale (*0 = not at all painful, 10 = most
94 severe pain imaginable*). All situations pertained to physical pain. Scores were averaged across
95 the 14 items (Cronbach’s $\alpha = .90$) to create a composite index for analysis.

96

97 **Analyses**

98 Simple linear regression was used to test whether higher PSQ scores would predict lower
99 pain tolerance and lower pain threshold assessed in the first part of the study. Multilevel
100 modelling was used to test whether higher PSQ scores would predict overall higher subjective
101 pain intensity assessed in the second part of the study. It was also used to test whether higher
102 PSQ scores would predict a stronger positive effect of objective pressure amount on subjective
103 pain intensity. Analytic details of multilevel modelling are specified below.

104 Because objective pressure amount was nested within participants, we used 2-level
105 multilevel models. We ran four models that operationalized objective pressure amount in
106 different ways. In model 1, objective pressure amount was simply standardized across all trials.
107 Subjective pain intensity was thus modelled as a function of PSQ score (level 2; standardized),
108 objective pressure amount (level 1; grand standardized), and the interaction between them (cross-
109 level). Because the predictors were standardized, each coefficient would estimate the effect of
110 increasing the predictor's value by one standard deviation. To facilitate interpretation, we also
111 ran model 2, which was identical to model 1 except that the predictors were mean-centered
112 (rather than standardized) such that each coefficient would estimate the effect of increasing the
113 predictor's value by one raw scale unit (1 ozf for objective pressure amount; 1 point on an 11-
114 point scale for PSQ score).

115 In model 3, we disentangled the distinct influence of both within-participant and
116 between-participant effects of objective pressure amount, which would allow us to examine
117 whether PSQ score separately interacted with the within-participant and between-participant
118 effects of objective pressure amount (Enders & Tofighi, 2007). To determine the within-
119 participant effect of objective pressure amount (i.e., as it increased from trial to trial) on
120 subjective pain intensity, objective pressure amount was standardized within-participant (level

121 1). To determine the between-participant effect of objective pressure amount (i.e., as it was
122 higher overall for some participants) on subjective pain intensity, participant-level mean
123 objective pressure amount was standardized between-participant (level 2). Together, subjective
124 pain intensity was modelled as a function of PSQ score (level 2; standardized), objective
125 pressure amount (level 1; standardized within-participant), objective pressure amount (level 2;
126 standardized between-participant), the interaction between PSQ score and objective pressure
127 amount standardized within-participant (cross-level), and the interaction between PSQ score and
128 objective pressure amount standardized between-participant (level 2). Again, because the
129 predictors were standardized, each coefficient would estimate the effect of increasing the
130 predictor's value by one standard deviation. To facilitate interpretation, we also ran model 4,
131 which was identical to model 3 except that the predictors were mean-centered (rather than
132 standardized) such that each coefficient would estimate the effect of increasing the predictor's
133 value by one raw scale unit.

134 Each model was fit by REML with an unstructured covariance matrix and Satterthwaite
135 degrees of freedom using the `lmer` function in the `lme4` package v1.1-28 (Bates et al., 2022)
136 and the `lmerTest` package v.3.1-3 (Kuznetsova et al., 2020) in R 4.1.3 (R Core Team, 2022).
137 Given the cross-level interaction term, we modelled a random slope for the level 1 predictor
138 (objective pressure amount) in addition to a random intercept (Aguinis et al., 2013). Across
139 models, the intraclass correlation coefficient suggested that subjective pain intensity was mildly
140 clustered within participants ($ICC = .128$), with 12.8% of the total variance in subjective pain
141 intensity attributable to between-participant variation and 87.2% attributable to within-
142 participant variation. Substantial between-participant variations were found both in overall
143 subjective pain intensity (i.e., random intercept, with its 95% confidence interval excluding zero)

144 and in the within-participant association between objective pressure amount and subjective pain
145 intensity (i.e., random slope of objective pressure amount predicting subjective pain intensity,
146 with its 95% confidence interval excluding zero).

147

148

Results

149 The four multilevel models found conceptually similar results. Key results are
150 summarized below. Full results are presented in Table S20.

151 Model 1 found that higher PSQ scores predicted overall higher subjective pain intensity
152 (main effect $\beta = 15.472$, $SE = 3.516$, $t(230.841) = 4.401$, $p = 1.65e-5$, $R^2 = .077$). Unsurprisingly,
153 higher objective pressure amount predicted higher subjective pain intensity (main effect $\beta =$
154 65.344 , $SE = 1.929$, $t(215.616) = 33.875$, $p < 2e-16$, $R^2 = .842$). This predictive effect (of
155 objective pressure amount on subjective pain intensity) was amplified by higher PSQ scores
156 (cross-level interaction $\beta = 4.822$, $SE = 1.936$, $t(215.279) = 2.490$, $p = .0135$, $R^2 = .028$), as
157 depicted in Figure S3a. Model 2 found the same pattern of results (Figure S3b), only with
158 different coefficient estimates (as the predictors were mean-centered rather than standardized).

159 As in models 1–2, model 3 found that higher PSQ scores predicted overall higher
160 subjective pain intensity (main effect $\beta = 3.012$, $SE = 0.874$, $t(253.266) = 3.446$, $p = 6.65e-4$, R^2
161 $= .045$). Within-participant trial-to-trial increases in objective pressure amount predicted higher
162 subjective pain intensity (main effect $\beta = 68.736$, $SE = 2.053$, $t(207.874) = 33.448$, $p < 2e-16$, R^2
163 $= .843$). This predictive effect (of within-participant trial-to-trial increases in objective pressure
164 amount on subjective pain intensity) was amplified by higher PSQ scores (cross-level interaction
165 $\beta = 5.314$, $SE = 2.060$, $t(208.234) = 2.580$, $p = 1.05e-4$, $R^2 = .031$), as shown in Figure S3c.
166 Between-participant variations in overall objective pressure amount did not predict subjective

167 pain intensity (main effect $\beta = 1.290$, $SE = 0.883$, $t(257.507) = 1.461$, $p = .145$, $R^2 = .008$). This
 168 non-significant predictive effect (of between-participant variations in overall objective pressure
 169 amount on subjective pain intensity) was also not affected by PSQ scores (level 2 interaction $\beta =$
 170 -0.148 , $SE = 0.811$, $t(254.206) = -0.182$, $p = .856$, $R^2 = 0$). Model 4 found the same pattern of
 171 results (Figure S3d), only with different coefficient estimates (as the predictors were mean-
 172 centered rather than standardized).

173 In short, multilevel modelling analyses found that higher PSQ scores predicted overall
 174 higher subjective pain intensity and steeper increases in subjective pain intensity as a result of
 175 within-participant trial-to-trial increases in objective pressure amount. In addition, simple linear
 176 regression found that higher PSQ scores predicted lower pain tolerance ($\beta = -0.165$, $SE = 0.063$,
 177 $t(252) = -2.640$, $p = .0088$, $R^2 = .0269$). Similar to prior findings (Ruscheweyh et al., 2009),
 178 higher PSQ scores did not significantly predict lower pain threshold despite the marginal trend (β
 179 $= -0.108$, $SE = 0.062$, $t(260) = -1.747$, $p = .0818$, $R^2 = .0116$).

180

181 **Pain Sensitivity Predicts Moral Views (Studies 1a–1c)**

182 *Method*

183 **Studies 1a (Exploratory) and 1b (Direct Replication)**

184 *Participants*

185 **Study 1a.** Adults in the U.S. were recruited on May 13, 2019 through Amazon
 186 Mechanical Turk to complete a multi-part exploratory survey. Our data collection targeted a
 187 sample size of roughly 1,000 participants with useable data. In total, 950 participants ($M_{age} =$
 188 36.05 , $SD_{age} = 10.81$) completed the survey and provided consent (248 others did not) and
 189 passed the attention check (8 others did not) and problematic response patterns check (123 others

190 did not). Most participants indicated their gender as “woman” ($n = 440$) or “man” ($n = 500$), and
191 only 10 indicated “something else” ($n = 2$), “prefer not to say” ($n = 3$), or skipped this question
192 ($n = 5$). For all analyses involving gender as a variable, we reported results based on women and
193 men only; including the other 10 participants would not change any of the conclusions. In terms
194 of political orientation ($M = 4.87$, $SD = 2.64$), 405 participants were left of center ($M = 2.27$, SD
195 $= 1.11$), 404 right of center ($M = 7.45$, $SD = 1.10$), 115 at center, and 26 skipped this question.

196 **Study 1b.** Adults in the U.S. were recruited on October 6–7, 2020 through Prolific. Our
197 data collection targeted an initial sample size of roughly 500 participants with useable data, after
198 which we would examine the distribution of liberals and conservatives and balance them out by
199 continuing recruitment of participants on the less-represented side of the ideological spectrum. In
200 total, 686 participants ($M_{age} = 34.20$, $SD_{age} = 12.82$) completed the survey and provided
201 re consent (46 others did not) and passed the attention check (15 others did not) and problematic
202 response patterns check (38 others did not). Most participants indicated their gender as “woman”
203 ($n = 366$) or “man” ($n = 309$), and only 11 indicated “something else” ($n = 1$), “prefer not to say”
204 ($n = 8$), or skipped this question ($n = 2$). For all analyses involving gender as a variable, we
205 reported results based on women and men only; including the other 11 participants would not
206 change any of the conclusions. In terms of political orientation ($M = 4.87$, $SD = 2.68$), 287
207 participants were left of center ($M = 2.18$, $SD = 1.06$), 288 right of center ($M = 7.50$, $SD = 1.06$),
208 84 at center, and 27 skipped this question.

209

210 *Measures*

211 **Moral Foundations Questionnaire.** The MFQ (Graham et al., 2011) included 15 items
212 that measured the extent to which participants considered something relevant to their judgments

213 of right and wrong (e.g., “Whether or not someone acted unfairly”) on a 6-point scale (*0 = not at*
214 *all relevant, 5 = extremely relevant*) and 15 items that measured the extent to which participants
215 supported a moral belief or attitude (e.g., “Compassion for those who are suffering is the most
216 crucial virtue”) on a 6-point scale (*0 = strongly disagree, 5 = strongly agree*). Two additional
217 filler items were included as in the original MFQ. Each of the 30 items tapped into participants’
218 endorsement of one of the five moral foundations (care/harm, fairness/cheating, loyalty/betrayal,
219 authority/subversion, and sanctity/degradation). For each moral foundation, a *relevance* score
220 was operationalized as the average score across the three “relevant” items, and a *support* score
221 was operationalized as the average score across the three “support” items.

222 **Pain Sensitivity Questionnaire.** As described in the *Method* section of the
223 psychophysical validation study, the PSQ (Ruscheweyh et al., 2009, 2012; Sellers et al., 2013)
224 included 14 items (plus three fillers) that measured the extent to which participants found an
225 imagined situation painful (e.g., “You grazed your knee falling off your bicycle”) on a 11-point
226 scale (*0 = not at all painful, 10 = most severe pain imaginable*). All situations pertained to
227 physical pain. Pain sensitivity was operationalized as the average score across all 14 items.

228 **Disgust Scale.** The DS (Haidt et al., 1994) was chosen because the original
229 demonstration of the link between disgust sensitivity and political conservatism (Inbar et al.,
230 2009) used the same scale (shortened version in their study 1, full version in their study 2). The
231 DS used in our Study 1a included 16 items that measured how participants felt about a
232 potentially disgust-eliciting situation (e.g., “It bothers me to hear someone clear a throat full of
233 mucus”) on a 2-point scale (*agree, disagree*) and 15 items that measured the extent to which
234 participants found a situation disgusting (e.g., “You see a bowel movement left unflushed in a
235 public bathroom”) on a 3-point scale (*not disgusting, slightly disgusting, disgusting*). One item

236 from the original DS was missing in Study 1a due to a clerical error but included in Study 1b,
237 where the scale labels were also revised (first part of the scale: *true, false*; second part of the
238 scale: *not disgusting at all, slightly disgusting, very disgusting*). Disgust sensitivity was
239 operationalized by coding the first part of the scale (0 = no disgust reaction, 1 = disgust reaction)
240 and the second part of the scale (0 = no disgust reaction, 0.5 = slight disgust reaction, 1 = disgust
241 reaction) on the same scale range, then averaging scores across all but four items that were pre-
242 determined for exclusion due to their relevance to sexual morality (“I think it is immoral for
243 someone to seek sexual pleasure from animals”; “I think homosexual activities are immoral”;
244 “As part of a sex education class, you are required to inflate a new lubricated condom, using
245 your mouth”; “You hear about a 30-year-old man who seeks sexual relationships with 80-year-
246 old women”). Including these four items that tapped into moral disgust would have artifactually
247 inflated the associative effects of physical disgust sensitivity with moral foundations.

248 **Emotion Reactivity Scale.** 21 items (Nock et al., 2008) measured the extent to which
249 participants considered their emotional reactions to be sensitive, intense, and persistent in general
250 (e.g., “I tend to get very emotional very easily”) on a 4-point scale (*not at all like me, somewhat*
251 *unlike me, somewhat like me, completely like me*). Emotion reactivity was operationalized as the
252 average score across all items.

253 **State-Trait Anxiety Inventory.** 20 items (Spielberger, 2012) measured state anxiety
254 (e.g., “I feel nervous”) on a 4-point scale (*not at all, somewhat, moderately so, very much so*) and
255 19 items measured trait anxiety (e.g., “I worry too much over something that really doesn’t
256 matter”) on a 4-point scale (*almost never, sometimes, often, almost always*). One original trait
257 item was missing due to a clerical error in Study 1a but included in Study 1b. Scores across all
258 items were averaged to form the overall index of anxiety.

259 **Trait Anger Scale.** 15 items (Spielberger et al., 1983) measured the frequency with
 260 which participants felt angry (e.g., “It makes me furious when I am criticized in front of others”)
 261 on a 4-point scale (*almost never, sometimes, often, almost always*). Scores across all items were
 262 averaged to form the overall index of anger.

263 **Questionnaire of Cognitive and Affective Empathy.** 31 items (Reniers et al., 2011)
 264 measured the frequency and ease with which participants experienced cognitive (e.g., “I can
 265 easily work out what another person might want to talk about”) and affective empathy (e.g., “I
 266 am happy when I am with a cheerful group and sad when the others are glum”) on a 6-point scale
 267 (from *strongly disagree* to *strongly agree*). Scores across all items were averaged to form the
 268 overall index of empathy.

269

270 **Study 1c (Preregistered Conceptual Replication)**

271 *Participants*

272 Adults in the U.S. were recruited on January 6–12, 2021 through Prolific. Our data
 273 collection followed the preregistered plan, which determined the required sample size by a priori
 274 power analysis (target N of useable data = 1,131 based on $\alpha = 0.05$, power = 0.80, partial $r^2 =$
 275 0.006926 = the smallest effect size in Study 1a among those of interest within budgetary
 276 constraints, namely, the interaction effect of pain sensitivity \times political orientation on the
 277 relevance of loyalty/betrayal) and an expected attrition rate of 10% (target N of recruitment =
 278 1,131 / 90% = 1,257). We also followed the preregistered sampling strategy (adapted from prior
 279 research; Camerer et al., 2018), examined the distribution of liberals and conservatives after
 280 initial data collection, and balanced them out by continuing recruitment of participants on the
 281 less-represented side of the ideological spectrum. In total, 1,313 participants ($M_{age} = 36.37$, SD_{age}

282 = 14.24) completed the survey and provided re-consent (61 others did not) and passed the
283 preregistered attention check (27 others did not) and preregistered problematic response patterns
284 check (10 others did not). Most participants indicated their gender as “woman” ($n = 669$) or
285 “man” ($n = 598$), and only 16 indicated “prefer not to say” ($n = 14$) or skipped this question ($n =$
286 2). For all analyses involving gender as a variable, we reported results based on women and men
287 only; including the other 16 participants would not change any of the conclusions. In terms of
288 political orientation ($M = 4.77$, $SD = 2.80$), 583 participants were left of center ($M = 2.09$, $SD =$
289 1.10), 554 right of center ($M = 7.54$, $SD = 1.11$), 123 at center, and 53 skipped this question.

290

291 *Measures*

292 Study 1c included the same Moral Foundations Questionnaire (Graham et al., 2011) and
293 PSQ (Ruscheweyh et al., 2009, 2012; Sellers et al., 2013) as in Studies 1a and 1b, but a
294 psychometrically improved version of the Disgust Scale.

295 **Disgust Scale – Revised.** Studies 1a–1b used the original Disgust Scale, as in the original
296 demonstration of the link between disgust sensitivity and political conservatism (Inbar et al.,
297 2009). Subsequent psychometric research (van Overveld et al., 2011) recommended the use of
298 the “Disgust Scale - Revised” (Olatunji et al., 2007), which we used in Study 1c to ensure
299 robustness of results. The DS-R included many of the same items from the original DS but used
300 different response scales. Specifically, it included 14 items that measured how participants felt
301 about a potentially disgust-eliciting situation (e.g., “It bothers me to hear someone clear a throat
302 full of mucus”) on a 5-point scale [$0 = strongly disagree (very untrue about me)$, $2 = neither$
303 $agree nor disagree$, $4 = strongly agree (very true about me)$] and 13 items that measured the
304 extent to which participants found a situation disgusting (e.g., “You see maggots on a piece of

305 meat in an outdoor garbage pail”) on a 5-point scale ($0 = \textit{not disgusting at all}$, $4 = \textit{extremely}$
306 *disgusting*). Disgust sensitivity was operationalized as the average score across all items, except
307 one that was pre-determined for exclusion due to its relevance to sexual morality (“As part of a
308 sex education class, you are required to inflate a new unlubricated condom, using your mouth”) and
309 two filler items (“I would rather eat a piece of fruit than a piece of paper”; “You see a person
310 eating an apple with a knife and fork”).

311

312 *Analyses*

313 In addition to the analyses reported in the article, zero-order correlations are available in
314 Table S21.

315

316 **Pain Sensitivity Predicts Political Views (Studies 2a–2b)**

317 *Method*

318 **Study 2a (Exploratory): Pre-Election Primary Data Collection**

319 *Participants*

320 Adults in the U.S. were recruited on October 10–15, 2020 through Prolific. Our data
321 collection targeted a sample size of roughly 1,000 participants with useable data, with the
322 distribution of liberals and conservatives balanced out by continuing recruitment of participants
323 on the less-represented side of the ideological spectrum. In total, 1,007 participants ($M_{age} =$
324 40.28 , $SD_{age} = 15.53$) completed the survey and provided consent (26 others did not) and
325 passed the attention check (19 others did not) and problematic response patterns check (14 others
326 did not). 3 other participants were excluded for repeated completion of the study. Most
327 participants indicated their gender as “woman” ($n = 484$) or “man” ($n = 507$), and only 16

328 indicated “prefer not to say” ($n = 11$) or skipped this question ($n = 5$). Political orientation was
329 measured the same way as in Studies 1a–1c. We also asked participants, “What is your political
330 affiliation?” with the response options “Democrat,” “Republican,” “Independent,” and “Other
331 (Please Specify): ____.” In terms of political orientation ($M = 4.79$, $SD = 2.72$), 455 participants
332 were left of center ($M = 2.15$, $SD = 1.11$), 434 right of center ($M = 7.50$, $SD = 1.10$), 116 at
333 center, and 2 skipped this question. In terms of political affiliation, 389 indicated Democrat, 356
334 Republican, 222 independent, 39 other, and 1 skipped this question.

335

336 *Measures*

337 **Attitudes Toward Political Issues with Item-Specific Scale Labels.** For 15 issues
338 (adapted from prior research; Day et al., 2014; Feinberg & Willer, 2015; Koleva et al., 2012;
339 Qian & Yahara, 2020), participants were asked to “Please select the attitude that comes closest to
340 your views on ____” (e.g., abortion, illegal immigrants). Responses were made on a 7-point scale,
341 with item-specific scale labels, some of which showed typically conservative attitudes on the
342 higher end and others showed typically liberal attitudes on the higher end (Table S22). The latter
343 category of items was reverse-scored such that higher scores would always indicate more
344 conservative attitudes.

345 **Attitudes Toward Political Issues with Items-General Scale Labels.** For 10 issues
346 (adapted from prior research; Christie et al., 2019; Feinberg & Willer, 2015; Franks & Scherr,
347 2019; Frimer et al., 2017; Monroe et al., 2020), participants were asked to “Please rate the extent
348 to which you support or oppose each of the following” on a 7-point scale ($-3 = strongly oppose$,
349 $3 = strongly support$) (Table S22). Some issues were typically supported by conservatives (e.g.,
350 war in Afghanistan) and others by liberals (e.g., legalization of marijuana). The latter category of

351 items was reverse-scored such that higher scores would always indicate more conservative
352 attitudes.

353 **Generic Voting Likelihood.** 3 items (in fixed order) asked participants to indicate their
354 likelihood of voting for a liberal, a conservative, or an independent political candidate (Table
355 S23) on a 7-point scale (from *extremely unlikely* to *extremely likely*).

356 **Support for Political Figures.** Participants were asked to indicate their agreement or
357 disagreement with 3 statements for each of 11 leading political figures (Table S24) on a 7-point
358 scale (from *strongly disagree* to *strongly agree*) plus an option of *I do not know this person*.
359 Using Donald Trump as an example here, the 3 statements were “I support Donald Trump,” “I
360 approve of Donald Trump’s performance in the administration of his job,” and “I support the
361 political issues that Donald Trump stands for.” For each political figure, the 3 statements had
362 high internal reliability and were thus averaged to form the overall index of support.

363 **Intended Voting Preference.** Participants were asked, “Who do you intend to vote for in
364 the upcoming presidential election?” Options included “Donald Trump,” “Joe Biden,” “Other
365 (please specify): _____,” “I haven’t decided yet,” and “No one.” The vast majority of participants
366 indicated Trump or Biden (Table S8), so our analysis focused on these two options.

367 **Hypothetical Voting Preference.** Participants were asked an exploratory open-ended
368 question, “Hypothetically, imagine you could vote for anyone in the upcoming presidential
369 election, regardless of whether they are currently in the running. Who would you vote for?”
370 (Table S25).

371 **Pain Sensitivity Questionnaire.** We used the same PSQ (Ruscheweyh et al., 2009, 2012;
372 Sellers et al., 2013) as in Studies 1a–1c and scored it the same way.

373

374 **Study 2a (Exploratory): Post-Election Brief Data Collection**

375 *Participants*

376 On November 4, 2020 (right after November 3 the Election Day), we recruited all
377 original participants to complete a brief post-election survey. To ensure timeliness, our data
378 collection was planned such that we would close the survey either 5 days after posting it or when
379 all of the original participants had responded to the invite, whichever would happen first. In the
380 end, we concluded data collection on November 9, 2020. 723 of the 1,007 original participants
381 (71.8%) completed the survey and provided reconsent (17 others did not) and passed the
382 attention check (14 others did not). 2 others were excluded for repeated completion of the study.

383

384 *Measures*

385 **Actual Voting Preference.** Participants were asked, “Who did you vote for in the 2020
386 presidential election?” Options included “Donald Trump,” “Joe Biden,” “Other (please specify):
387 ___,” “Couldn’t decide,” and “No one.” Again, the vast majority of participants indicated Trump
388 or Biden (Table S8), so our analysis focused on these two options.

389 **Hypothetical Voting Preference.** Participants were asked an exploratory open-ended
390 question, “Hypothetically, imagine you could vote for anyone in the 2020 presidential election,
391 regardless of whether they were or were not actually in the running. Who would you vote for?”
392 (Table S25).

393

394 **Study 2b (Preregistered Replication)**

395 *Participants*

396 Adults in the U.S. were recruited on July 15–17, 2021 through Prolific. Our data
397 collection followed the preregistered plan, which determined the required sample size by a priori
398 power analysis (target N of useable data = 759 based on $\alpha = 0.05$, power = 0.80, partial $r =$
399 0.1015294 = the smallest effect size in Study 2a among those of interest here, namely, the
400 interaction effect of pain sensitivity \times political orientation on the likelihood of voting for a
401 conservative political candidate) and an expected attrition rate of 10% (target N of recruitment =
402 $759 / 90\% = 843$). We also followed the preregistered sampling strategy such that after initial
403 data collection, we examined the distribution of liberals and conservatives and balanced them out
404 by continuing recruitment of participants on the less-represented side of the ideological
405 spectrum. In total, 1,022 participants ($M_{age} = 35.17$, $SD_{age} = 11.83$) completed the survey and
406 provided consent (6 others did not) and passed the preregistered attention check (47 others did
407 not) and preregistered problematic response patterns check (165 others did not). 3 others were
408 excluded for repeated completion of the study. Most participants indicated their gender as
409 “woman” ($n = 426$) or “man” ($n = 572$), and only 24 indicated “something else” ($n = 6$), “prefer
410 not to say” ($n = 10$), or skipped this question ($n = 8$). Political orientation was measured the same
411 way as in Studies 1a–2a. We also asked, “What is your political affiliation?” with the response
412 options “Democrat,” “Republican,” “Independent,” and “Other (Please Specify): ____.” In terms
413 of political orientation ($M = 5.01$, $SD = 2.56$), 424 participants were left of center ($M = 2.39$, SD
414 $= 1.06$), 453 right of center ($M = 7.47$, $SD = 1.07$), 138 at center, and 7 skipped this question. In
415 terms of political affiliation, 485 indicated Democrat, 267 Republican, 230 independent, 33
416 other, and 7 skipped this question.

417

418

Testing the Process: Perception of Harm (Study 3, Preregistered)

Method

419

420 Participants

421 Adults in the U.S. were recruited on September 28–October 5, 2021 through Prolific. Our
422 data collection followed the preregistered plan, which involved a multi-stage strategy of sample
423 size determination based on power analyses (see next section). Given our focus on moderated
424 mediation, we used the `lavaan` package v0.6-10 (Rosseel et al., 2022) in R 4.1.3 (R Core Team,
425 2022) to compute indices of moderated mediation from pilot data, and then the `simsem` package
426 v0.5-16 (Jorgensen et al., 2021) to run simulations for power estimation (final target N of useable
427 data = 1,645 based on $\alpha = 0.05$, power = 0.80, and index of moderated mediation = -0.0192).
428 With an expected attrition rate of 10%, target N of recruitment = $1,645 / 90\% = 1,828$. We also
429 followed the preregistered sampling strategy such that after initial data collection, we examined
430 the distribution of liberals and conservatives and balanced them out by continuing recruitment of
431 participants on the less-represented side of the ideological spectrum. In total, 1,658 participants
432 ($M_{age} = 33.35$, $SD_{age} = 11.06$) completed the survey and provided reconsent (17 others did not)
433 and passed the preregistered attention check (172 others did not) and preregistered problematic
434 response patterns check (381 others did not). Most participants indicated their gender as
435 “female” ($n = 760$) or “male” ($n = 878$), and only 20 indicated “other” ($n = 14$) or skipped this
436 question ($n = 6$). Political orientation was measured the same way as in Studies 1a–2b. We also
437 asked, “What is your political affiliation?” with the response options “Democrat,” “Republican,”
438 “Independent,” and “Other (Please Specify): ____.” In terms of political orientation ($M = 4.95$, SD
439 = 2.77), 717 participants were left of center ($M = 2.26$, $SD = 1.08$), 705 right of center ($M = 7.66$,
440 $SD = 1.10$), 145 at center, and 91 skipped this question. In terms of political affiliation, 834
441 indicated Democrat, 406 Republican, 356 independent, 55 other, and 7 skipped this question.

442

443 Preregistered Multi-Stage Data Collection

444 Our data collection followed the preregistered plan, which involved a multi-stage strategy
445 of sample size determination adapted from prior research (Camerer et al., 2018): If the
446 preregistered hypotheses were supported in the first stage, we concluded data collection; if not,
447 we proceeded to the second stage. If the preregistered hypotheses were supported in the second
448 stage, we concluded data collection; if not, we proceeded to the third stage, after which we
449 concluded data collection.

450 Across stages, sample sizes were determined by a priori power analyses based on $\alpha =$
451 0.05 , $\text{power} = 0.80$, and an index of moderated mediation. We chose the index of moderated
452 mediation with the smallest absolute value (-0.024) among the significant effects of interest in a
453 pilot study embedded in a larger exploratory survey within budgetary constraints, namely, the
454 index of moderated mediation where political orientation moderated the path from pain
455 sensitivity to perceived harm in violations of authority/subversion, which in turn predicted
456 support for authority/subversion. The first stage of our power analysis assumed 100% of the
457 original index (-0.024). The second stage assumed 90% of the original index ($90\% * -0.024 = -$
458 0.0216). The third stage assumed 80% of the original index ($80\% * -0.024 = -0.0192$). Based on
459 these power analyses, target N s of useable data by the end of the first, second, and third stages
460 were 1,055, 1,256, and 1,645, respectively. With an expected attrition rate of 10%, target N s of
461 recruitment ($= \text{target } N\text{s of useable data} / 90\%$) by the end of the first, second, and third stages
462 were 1,172, 1,396, and 1,828, respectively.

463

464 Measures

465 **Perceived Harm in Violations of and Disagreements with Moral Foundations.** We
466 modified each original item in the Moral Foundations Questionnaire (Graham et al., 2011) to
467 assess participants' perceived harm in behavioral violations of and attitudinal disagreements with
468 each moral foundation. For example, one original item in the MFQ asked participants to indicate
469 the extent to which they considered "Whether or not someone acted unfairly" to be relevant to
470 their judgments of right and wrong (*0 = not at all relevant, 5 = extremely relevant*). We
471 modified the item into a behavioral violation by removing the expression "Whether or not" and
472 asking participants to indicate the extent to which they perceived harm in "Someone acted
473 unfairly" (*0 = no harm at all, 5 = very severe harm*). Another original item in the MFQ asked
474 participants to indicate the extent to which they agreed that "Compassion for those who are
475 suffering is the most crucial virtue" (*0 = strongly disagree, 5 = strongly agree*). We modified the
476 item into an attitudinal disagreement: "Person A **DISAGREES** with the following statement:
477 'Compassion for those who are suffering is the most crucial virtue.' To what extent do you
478 perceive harm in Person A's view?" (*0 = no harm at all, 5 = very severe harm*). The same
479 structural modifications were made to all original items in the MFQ, rendering a total of 32
480 modified items (Table S26).

481 **Perceived Harm in Liberal Attitude and in Conservative Attitude Toward**
482 **Contentious Political Issues.** Recall that in an earlier part of the study, participants had rated
483 their own attitudes toward 10 contentious political issues, five with item-specific scale labels and
484 five with items-general scale labels. In this part of the study, we turned each scale label into a
485 stand-alone political view (see next paragraph). We assessed the extent to which participants
486 perceived each political view to be a harmful view (*0 = no harm at all, 5 = very severe harm*).
487 As an example of the issues with item-specific scale labels, participants read, "Person E

488 **AGREES** with the following statement: ‘The government should decrease the current
 489 restrictions because global warming is a theory that has not yet been proven.’ To what extent do
 490 you perceive harm in Person E’s view?’ and “Person F **AGREES** with the following statement:
 491 ‘The government should increase restrictions on emissions from cars and industrial facilities
 492 such as power plants and factories in an attempt to reduce the effects of global warming.’ To
 493 what extent do you perceive harm in Person F’s view?” As an example of the issues with item-
 494 general scale labels, participants read, “Person S **SUPPORTS** universal health care. To what
 495 extent do you perceive harm in Person S’s view?” and “Person T **OPPOSES** universal health
 496 care. To what extent do you perceive harm in Person T’s view?”

497 The same structural modifications were made to all 10 contentious political issues,
 498 rendering 20 items that assessed participants’ perceived harm in the liberal attitude and in the
 499 conservative attitude toward each issue (Table S27). To simplify analyses, for each issue, the
 500 difference score (perceived harm in the liberal attitude minus perceived harm in the conservative
 501 attitude; $PH_{lib-con}$) served as the preregistered measure of interest. We also conducted additional
 502 analyses that separately examined perceived harm in the liberal attitude and perceived harm in
 503 the conservative attitude, which showed conceptually the same results as the difference score
 504 (see *Results*).

505

506 **Lay Intuitions about Pain Sensitivity (Study 4, Descriptive)**

507 *Method*

508 **Participants**

509 Adults in the U.S. were recruited on October 30–31, 2020 through Prolific. Our data
 510 collection targeted a sample size of roughly 600 participants with useable data. We chose this

511 sample size because this was a purely descriptive study, with three conditions, and we aimed to
512 have roughly 200 participants per condition in order to obtain reasonably confident estimates of
513 lay intuitions about pain sensitivity in each condition. With an expected attrition rate of 20%,
514 target N of recruitment was $600 / 80\% = 750$. In total, 724 participants ($M_{age} = 32.31$, $SD_{age} =$
515 12.13) completed the survey and provided consent (129 others did not) and passed the attention
516 check (35 others did not) and problematic response patterns check (5 others did not). Most
517 participants indicated their gender as “woman” ($n = 361$) or “man” ($n = 349$), and only 14
518 indicated “something else” ($n = 1$), “prefer not to say” ($n = 10$), or skipped this question ($n = 3$).

519

520 **Materials**

521 For clear understanding of our operationalizations, we describe the survey below by
522 retaining its formatting features.

523 **Information about Pain Sensitivity.** Participants were first told that “The following
524 items are examples from a measure of **SENSITIVITY TO PHYSICAL PAIN**. If a person
525 responds to the following items with generally high ratings, they are **high on sensitivity to**
526 **physical pain**. If a person responds to the following items with generally low ratings, they are
527 **low on sensitivity to physical pain**.” Then, participants read the instructions and six sample
528 items (in fixed order) of the Pain Sensitivity Questionnaire. Next, they were asked to “please
529 imagine a [person] who responded to the items with generally high ratings. We are interested in
530 your impression of **the [person] with high sensitivity to physical pain** (compared with a
531 [person] with low sensitivity to physical pain). How do you think this person would respond to
532 the following questionnaires?” The text in the [person] placeholder was either “person,”
533 “politically liberal person,” or “politically conservative person.” As noted in the study overview,

534 this manipulation (with three between-participant conditions) allowed us to examine lay
 535 intuitions about the interaction effects of pain sensitivity × political orientation in two ways (see
 536 **Analyses** below).

537 **Expected Moral Foundations of a Pain-Sensitive Person.** Participants read, “Part 1.
 538 When **a [person] with high sensitivity to physical pain** (compared with a [person] with low
 539 sensitivity to physical pain) decides whether something is right or wrong, to what extent do you
 540 think the following considerations are likely to be more relevant, or less relevant, to their
 541 thinking?” Participants rated the 15 items about relevance to morality (plus 1 filler item) in the
 542 Moral Foundations Questionnaire on a 7-point scale (-3 = *much less relevant to judgments of*
 543 *right and wrong by a [person] with high sensitivity to physical pain (than a [person] with low*
 544 *sensitivity to physical pain), 0 = about equally relevant..., +3 = much more relevant...).*

545 Afterwards, participants read, “Part 2. To what extent do you think the following statements are
 546 likely to be agreed or disagreed more by **a [person] with high sensitivity to physical pain** (than
 547 a [person] with low sensitivity to physical pain)?” Participants rated the 15 MFQ items about
 548 moral belief or attitude (plus 1 filler item) on a 7-point scale (-3 = *disagreed much more by a*
 549 *[person] with high sensitivity to physical pain (than a [person] with low sensitivity to physical*
 550 *pain), 0 = agreed or disagreed about equally..., +3 = agreed much more...).*

551 **Expected Political Orientation of a Pain-Sensitive Person.** Participants were asked to
 552 “Please indicate the extent to which you think **a [person] with high sensitivity to physical pain**
 553 (compared with a [person] with low sensitivity to physical pain) is likely to be more politically
 554 liberal or conservative” on a 9-point scale (*1 = much more liberal, 5 = about the same, 9 = much*
 555 *more conservative).*

556 **Expected Voting Preference of a Pain-Sensitive Person.** Participants were asked,
 557 “Who do you think a [person] with **HIGH** sensitivity to physical pain is likely to vote for in
 558 the presidential election?” Options included “Donald Trump,” “Joe Biden,” “Other (please
 559 specify): __,” “Undecided,” and “No one.” Participants were also asked, “Who do you think a
 560 [person] with **LOW** sensitivity to physical pain is likely to vote for in the presidential
 561 election?” (with the same available options). Asking both questions made it possible to compare
 562 expected voting preferences of a [person] with high pain sensitivity vs. a [person] with low pain
 563 sensitivity. Next, participants were asked to “Please indicate the extent to which you think a
 564 [person] with high sensitivity to physical pain (compared with a [person] with low sensitivity
 565 to physical pain) is more or less likely to vote for...” a liberal, a conservative, and an
 566 independent political candidate (in fixed order) on a 7-point scale (-3 = *much less likely*, 0 =
 567 *about equally likely*, +3 = *much more likely*).

568 **Expected Support for Political Figures of a Pain-Sensitive Person.** Participants were
 569 asked to “Please indicate the extent to which you think each of the following politicians and the
 570 political issues they stand for are more approved/supported or disapproved/opposed by a
 571 [person] with high sensitivity to physical pain (compared with a [person] with low sensitivity
 572 to physical pain)” on a 7-point scale (-3 = *disapproved/opposed much more*, 0 =
 573 *approved/supported or disapproved/opposed about equally*, +3 = *approved/supported much*
 574 *more*) plus an option of *I do not know this person*. The same 11 political figures as in Studies 2a–
 575 2b were presented.

576 **Expected Attitudes Toward Political Issues of a Pain-Sensitive Person.** Participants
 577 were presented with the 10 political issues used in Studies 2b–3 (Table S28). For 5 of the
 578 political issues, two issue-specific attitudes were provided, and participants were asked to rate

579 the extent to which a pain-sensitive [person]’s attitude was closer to either attitude on a 7-point
580 scale. For the other 5 political issues, participants were asked to rate the extent to which each
581 issue was likely to be more supported or opposed by a [person] with high pain sensitivity than a
582 [person] with low pain sensitivity, on an issue-general 7-point scale.

583 **Comparison with Expected Political Orientation of a Disgust-Sensitive Person.**

584 Given prior research on the association between disgust sensitivity and political orientation, we
585 were also interested in exploring the comparison between lay intuitions about the political
586 orientation of a pain-sensitive [person] and lay intuitions about the political orientation of a
587 disgust-sensitive [person]. Therefore, participants were asked to imagine a [person] with high
588 sensitivity to physical disgust by reading the same kind of information as when we asked them to
589 imagine a [person] with high sensitivity to physical pain, except that here the word “pain” was
590 replaced by “disgust” and the Pain Sensitivity Questionnaire was replaced by the Disgust Scale.
591 Then participants were asked to rate their expected political orientation of a [person] with high
592 (vs. low) sensitivity to physical disgust (*1 = much more liberal, 5 = about the same, 9 = much*
593 *more conservative*).

594 In addition to examining lay intuitions about how pain sensitivity and disgust sensitivity
595 were associated with political orientation, we also examined lay intuitions about the strength of
596 these associations by asking participants, “To what extent do you think **sensitivity to physical**
597 **PAIN** is associated with political orientation?” and “To what extent do you think **sensitivity to**
598 **physical DISGUST** is associated with political orientation?” (*0 = not associated at all, 6 =*
599 *extremely associated*).

600 To explore whether participants might form different demographic impressions of the
601 imagined pain-sensitive person and disgust-sensitive person, participants were first asked to

602 “Recall the hypothetical **[person] with high sensitivity to physical PAIN**” and report this
603 person’s age, gender, race/ethnicity, and socioeconomic status (in fixed order). For each
604 demographic variable, “If [it] was entirely absent from your impression of the hypothetical
605 person, please select ‘N/A’.” Then participants did the same thing for “the hypothetical **[person]**
606 **with high sensitivity to physical DISGUST.**”

607

608 *Results*

609 Beyond the primary results reported in the article, we also explored the comparison
610 between lay intuitions about the political orientation of a pain-sensitive target and lay intuitions
611 about the political orientation of a disgust-sensitive target. Participants incorrectly expected that
612 a target with higher pain sensitivity was more likely to be politically liberal, $t(637) = -2.9292$, p
613 $= .00352$, but correctly expected that a target with higher disgust sensitivity was more likely to
614 be politically conservative, $t(666) = 4.7973$, $p = 1.986e-6$. Participants expected the strength of
615 association with political orientation to be stronger for pain sensitivity ($M = 2.70$, $SD = 1.62$)
616 than for disgust sensitivity ($M = 2.18$, $SD = 1.73$), $t(722) = 9.6266$, $p < 2.2e-16$. When
617 participants imagined a pain-sensitive target and a disgust-sensitive target, they formed
618 comparable demographic impressions in terms of age ($p = .5796$), gender ($p = .0546$),
619 race/ethnicity ($p = .9761$), and socioeconomic status ($p = .9996$), suggesting that participants’
620 different lay intuitions about pain sensitivity and disgust sensitivity were not due to different
621 demographic inferences.

622

623

SUPPLEMENTAL TABLES

624 **Table S1**625 *Interaction Effects of Pain Sensitivity × Political Orientation on Support for and Relevance of*626 *Moral Foundations in Study 1a*

Outcome	Interaction Effect of Pain Sensitivity × Political Orientation on Outcome					Effect of Pain Sensitivity on Outcome			
	β	<i>SE</i>	<i>t</i>	<i>df</i>	<i>p</i>	Among conservatives		Among liberals	
						β	<i>p</i>	β	<i>p</i>
<i>Support for moral foundation</i>									
Care/Harm	0.07	0.03	2.21	920	.027	0.38	<.001	0.23	<.001
Fairness/Cheating	0.20	0.03	6.67	920	<.001	0.54	<.001	0.12	.033
Loyalty/Betrayal	-0.07	0.03	-2.91	920	.004	0.40	<.001	0.50	<.001
Authority/Subversion	-0.15	0.03	-5.62	920	<.001	0.20	<.001	0.45	<.001
Sanctity/Degradation	-0.16	0.03	-6.00	920	<.001	0.23	<.001	0.48	<.001
<i>Relevance of moral foundation</i>									
Care/Harm	0.10	0.03	3.19	920	.001	0.23	<.001	-0.01	.827
Fairness/Cheating	0.12	0.03	3.55	920	<.001	0.25	<.001	-0.03	.573
Loyalty/Betrayal	-0.04	0.03	-1.50	920	.134	0.40	<.001	0.42	<.001
Authority/Subversion	-0.06	0.03	-2.32	920	.020	0.37	<.001	0.45	<.001
Sanctity/Degradation	-0.12	0.03	-4.38	920	<.001	0.30	<.001	0.47	<.001

627

628 *Note.* If we used the more stringent criterion of Bonferroni-corrected $\alpha = 0.05 / 10$

629 interaction effects of interest = 0.005, the interaction effects of pain sensitivity × political

630 orientation remained significant on attitudinal support for four of the five moral foundations (ps 631 $\leq .00369$) and on perceived relevance of three of the five moral foundations ($ps \leq 0.00147$).

632 Graphical depiction is available in Figure 2.

633 **Table S2**634 *Interaction Effects of Pain Sensitivity × Political Orientation on Support for and Relevance of*635 *Moral Foundations in Study 1b*

Outcome	Interaction Effect of Pain Sensitivity × Political Orientation on Outcome					Effect of Pain Sensitivity on Outcome			
	β	SE	t	df	p	Among conservatives		Among liberals	
	β					β	p	β	p
<i>Support for moral foundation</i>									
Care/Harm	0.07	0.04	1.88	655	.060	0.37	< .001	0.17	.003
Fairness/Cheating	0.19	0.03	5.79	655	< .001	0.52	< .001	0.14	.010
Loyalty/Betrayal	-0.11	0.03	-3.81	655	< .001	0.31	< .001	0.51	< .001
Authority/Subversion	-0.16	0.03	-5.69	655	< .001	0.15	< .001	0.47	< .001
Sanctity/Degradation	-0.14	0.03	-4.65	655	< .001	0.22	< .001	0.49	< .001
<i>Relevance of moral foundation</i>									
Care/Harm	0.11	0.04	2.94	655	.003	0.12	.033	-0.11	.070
Fairness/Cheating	0.16	0.04	4.39	655	< .001	0.20	< .001	-0.09	.110
Loyalty/Betrayal	-0.03	0.03	-0.99	655	.324	0.25	< .001	0.36	< .001
Authority/Subversion	-0.07	0.03	-2.12	655	.034	0.28	< .001	0.46	< .001
Sanctity/Degradation	-0.07	0.03	-2.01	655	.045	0.21	< .001	0.34	< .001

636

637 *Note.* Graphical depiction is available in Figure 3.

638 **Table S3**

639 *Hierarchical Regressions of Support for and Relevance of Moral Foundations on the Interaction*
 640 *Effect of Pain Sensitivity × Political Orientation and Their Main Effects (Step 1), Together with*
 641 *Control Predictors (Step 2), in Study 1b*

Predictor	Care/Harm		Fairness/Cheating		Loyalty/Betrayal		Authority/Subversion		Sanctity/Degradation	
	Step 1	Step 2	Step 1	Step 2	Step 1	Step 2	Step 1	Step 2	Step 1	Step 2
<i>Support for moral foundation</i>										
Pain Sensitivity × Political Orientation	0.08* (0.04)	0.05 (0.03)	0.19*** (0.03)	0.17*** (0.03)	-0.11*** (0.03)	-0.10*** (0.03)	-0.16*** (0.03)	-0.16*** (0.03)	-0.14*** (0.03)	-0.14*** (0.03)
Pain Sensitivity	0.31*** (0.04)	0.21*** (0.04)	0.35*** (0.03)	0.28*** (0.04)	0.39*** (0.03)	0.33*** (0.03)	0.30*** (0.03)	0.24*** (0.03)	0.36*** (0.03)	0.26*** (0.03)
Political Orientation	-0.17*** (0.04)	-0.12** (0.04)	-0.35*** (0.03)	-0.32*** (0.03)	0.44*** (0.03)	0.39*** (0.03)	0.55*** (0.03)	0.53*** (0.03)	0.48*** (0.03)	0.47*** (0.03)
Disgust Sensitivity		0.18*** (0.04)		0.08* (0.04)		0.07* (0.03)		0.06 (0.03)		0.20*** (0.03)
Emotion Reactivity		0.08 (0.05)		0.15** (0.05)		0.11* (0.05)		0.05 (0.04)		0.06 (0.05)
Anxiety		-0.03 (0.04)		-0.01 (0.04)		-0.18*** (0.04)		-0.16*** (0.04)		-0.10* (0.04)
Anger		-0.08 (0.05)		-0.04 (0.05)		0.02 (0.04)		0.02 (0.04)		0.01 (0.04)
Empathy		0.24*** (0.04)		0.11** (0.04)		-0.03 (0.03)		0.08* (0.03)		0.06 (0.03)
Gender		-0.15* (0.08)		0.01 (0.07)		0.24*** (0.07)		0.12 (0.06)		0.08 (0.07)
R^2	.122	.258	.270	.310	.389	.423	.435	.461	.389	.435
ΔR^2		.135		.040		.034		.027		.046
F	29.9***	24.58***	79.16***	31.82***	136.60***	51.86***	164.80***	60.64***	136.70***	54.50***
ΔF		19.35***		6.218***		6.167***		5.269***		8.580***
<i>Relevance of moral foundation</i>										
Pain Sensitivity × Political Orientation	0.12** (0.04)	0.08* (0.04)	0.17*** (0.04)	0.13*** (0.03)	-0.03 (0.04)	-0.06 (0.03)	-0.07* (0.03)	-0.08* (0.03)	-0.06 (0.03)	-0.07* (0.03)
Pain Sensitivity	0.04 (0.04)	-0.06 (0.04)	0.07 (0.03)	-0.02 (0.04)	0.30*** (0.04)	0.19*** (0.04)	0.36*** (0.03)	0.25*** (0.04)	0.28*** (0.04)	0.15*** (0.04)
Political Orientation	-0.15*** (0.04)	-0.11** (0.04)	-0.21*** (0.04)	-0.19*** (0.04)	0.27*** (0.04)	0.22*** (0.04)	0.29*** (0.03)	0.29*** (0.04)	0.36*** (0.04)	0.35*** (0.04)
Disgust Sensitivity		0.15* (0.04)		0.07 (0.04)		0.09* (0.04)		0.16*** (0.04)		0.22*** (0.04)
Emotion Reactivity		0.06 (0.06)		0.08 (0.05)		0.04 (0.05)		0.06 (0.05)		0.04 (0.05)
Anxiety		-0.09 (0.05)		-0.09 (0.05)		-0.12* (0.04)		-0.14*** (0.04)		-0.14*** (0.04)
Anger		0.03 (0.05)		0.03 (0.05)		0.17*** (0.05)		0.07 (0.05)		0.12* (0.05)
Empathy		0.33*** (0.04)		0.33*** (0.04)		0.18*** (0.04)		0.12*** (0.04)		0.10* (0.04)
Gender		-0.05 (0.08)		0.02 (0.08)		0.15 (0.08)		0.05 (0.07)		0.08 (0.07)
R^2	.038	.181	.080	.206	.149	.215	.238	.293	.224	.291
ΔR^2		.142		.126		.066		.055		.068
F	8.538***	15.58***	18.52***	18.32***	37.41***	19.38***	66.78***	29.29***	61.68***	29.05***
ΔF		18.40***		16.86***		8.965***		8.276***		10.11***

642 *Note.* Political orientation was a continuous variable (1 = liberal, 5 = centrist, 9 = conservative).

643 Gender was coded as a dichotomous variable (-1 = female, 1 = male). Standardized regression

644 coefficients are reported, with standard errors in parentheses. * $p < .05$, ** $p < .005$, *** $p <$

645 $.001$.

646 **Table S4**647 *Preregistered Interaction Effects of Pain Sensitivity × Political Orientation on Support for and*648 *Relevance of Moral Foundations in Study 1c*

Outcome	Interaction Effect of Pain Sensitivity × Political Orientation on Outcome					Effect of Pain Sensitivity on Outcome			
	β	<i>SE</i>	<i>t</i>	<i>df</i>	<i>p</i>	Among conservatives		Among liberals	
						β	<i>p</i>	β	<i>p</i>
<i>Support for moral foundation</i>									
Care/Harm	0.17	0.03	6.44	1256	< .001	0.38	< .001	0.06	.132
Fairness/Cheating	0.17	0.02	6.72	1256	< .001	0.39	< .001	0.06	.122
Loyalty/Betrayal	-0.12	0.02	-5.47	1256	< .001	0.20	< .001	0.39	< .001
Authority/Subversion	-0.15	0.02	-7.73	1256	< .001	0.12	< .001	0.35	< .001
Sanctity/Degradation	-0.13	0.02	-6.10	1256	< .001	0.20	< .001	0.41	< .001
<i>Relevance of moral foundation</i>									
Care/Harm	0.13	0.03	4.85	1256	< .001	0.16	< .001	-0.11	.005
Fairness/Cheating	0.14	0.03	5.45	1256	< .001	0.11	.012	-0.19	< .001
Loyalty/Betrayal	-0.03	0.02	-1.33	1256	.183	0.27	< .001	0.27	< .001
Authority/Subversion	-0.05	0.02	-1.84	1256	.066	0.30	< .001	0.30	< .001
Sanctity/Degradation	-0.07	0.02	-3.04	1256	.002	0.21	< .001	0.28	< .001

649

650 *Note.* Graphical depiction is available in Figure 4.

651 **Table S5**

652 *Hierarchical Regressions of Support for and Relevance of Moral Foundations on the*
 653 *Preregistered Interaction Effect of Pain Sensitivity × Political Orientation as well as Their Main*
 654 *Effects (Step 1), Together with Disgust Sensitivity and Gender (Step 2) and the Interaction Effect*
 655 *of Disgust Sensitivity × Political Orientation (Step 3), in Study 1c*

Predictor	Care/Harm			Fairness/Cheating			Loyalty/Betrayal			Authority/Subversion			Sanctity/Degradation		
	Step 1	Step 2	Step 3	Step 1	Step 2	Step 3	Step 1	Step 2	Step 3	Step 1	Step 2	Step 3	Step 1	Step 2	Step 3
<i>Support for moral foundation</i>															
Pain Sensitivity × Political Orientation	0.17***	0.14***	0.14***	0.17***	0.16***	0.17***	-0.12***	-0.10***	-0.10***	-0.15***	-0.16***	-0.16***	-0.13***	-0.16***	-0.16***
	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)
Pain Sensitivity	0.20***	0.24**	0.13***	0.22***	0.17***	0.17***	0.28***	0.25***	0.25***	0.21***	0.18***	0.18***	0.29***	0.21***	0.20***
	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)
Political Orientation	-0.19***	-0.18***	-0.18***	-0.36***	-0.37***	-0.37***	0.52***	0.49***	0.49***	0.63***	0.62***	0.62***	0.49***	0.48***	0.48***
	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)
Disgust Sensitivity		0.23***	0.23***		0.15***	0.15***		0.03	0.03		0.09***	0.09***		0.26***	0.26***
		(0.03)	(0.03)		(0.03)	(0.05)		(0.02)	(0.02)		(0.02)	(0.02)		(0.02)	(0.02)
Gender		-0.18**	-0.18**		0.06	0.05		0.38***	0.38***		0.03	0.03		-0.07	-0.06
		(0.06)	(0.06)		(0.05)	(0.05)		(0.05)	(0.05)		(0.04)	(0.04)		(0.05)	(0.05)
Disgust Sensitivity × Political Orientation			0.02			-0.04			0.01			0.00			0.01
			(0.03)			(0.03)			(0.02)			(0.02)			(0.02)
R ²	.099	.160	.160	.174	.192	.193	.387	.420	.420	.471	.477	.477	.358	.419	.419
ΔR ²		.061	.000		.017	.001		.033	.000		.006	.000		.061	.000
F	45.43***	47.17***	39.38***	87.30***	58.68***	49.21***	260.90***	179.00***	149.20***	367.40***	225.40***	187.70***	230.10***	178.30***	148.50***
ΔF		44.96***	0.516		13.18***	1.700		34.886***	0.256		7.008***	0.000		64.88***	0.122
<i>Relevance of moral foundation</i>															
Pain Sensitivity × Political Orientation	0.13***	0.10***	0.10***	0.14***	0.12***	0.13***	-0.03	-0.04	-0.04	-0.04	-0.06*	-0.06*	-0.07**	-0.10***	-0.10***
	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.02)	(0.03)	(0.02)	(0.03)	(0.03)
Pain Sensitivity	0.03	-0.01	-0.01	-0.05	-0.10	-0.10	0.27***	0.24***	0.23***	0.28***	0.22***	0.22***	0.23***	0.17***	0.17***
	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)
Political Orientation	-0.18	-0.16	-0.16	-0.24	-0.23	-0.23	0.29***	0.28***	0.28***	0.28***	0.28***	0.28***	0.37***	0.38***	0.38***
	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)
Disgust Sensitivity		0.16***	0.16***		0.17***	0.17***		0.09**	0.09**		0.20***	0.20***		0.20***	0.20***
		(0.03)	(0.03)		(0.03)	(0.03)		(0.03)	(0.03)		(0.03)	(0.03)		(0.03)	(0.03)
Gender		-0.32	-0.32		-0.14	-0.15		0.00	0.01		-0.05	-0.05		-0.12	-0.12
		(0.06)	(0.06)		(0.06)	(0.06)		(0.05)	(0.05)		(0.05)	(0.05)		(0.05)	(0.05)
Disgust Sensitivity × Political Orientation			0.00			-0.03			0.01			-0.01			0.00
			(0.03)			(0.03)			(0.03)			(0.03)			(0.03)
R ²	.044	.103	.103	.075	.110	.110	.174	.181	.181	.178	.214	.214	.215	.259	.259
ΔR ²		.058	.000		.035	.001		.007	.000		.037	.000		.043	.000
F	19.12***	28.29***	23.56***	33.41***	30.46***	25.59***	87.21***	54.74***	45.61***	89.30***	67.57***	56.28***	113.40***	86.33***	71.88***
ΔF		40.22***	0.005		24.16***	1.206		5.145***	0.169		28.94***	0.089		36.07***	0.004

656 *Note.* Political orientation was a continuous variable (*1 = liberal, 5 = centrist, 9 = conservative*).

657 Gender was coded as a dichotomous variable (*-1 = female, 1 = male*). Standardized regression

658 coefficients are reported, with standard errors in parentheses. * $p < .05$, ** $p < .005$, *** $p <$

659 $.001$.

660

661 **Table S6**

662 *Hierarchical Regressions of Political Orientation on Pain Sensitivity (Step 1), Together with*
 663 *Control Predictors (Step 2), in Studies 1a–1c*

Predictor	Study 1a		Study 1b		Study 1c	
	Step 1	Step 2	Step 1	Step 2	Step 1	Step 2
Pain Sensitivity	0.31*** (0.03)	0.17*** (0.04)	0.12** (0.04)	0.08** (0.04)	0.16*** (0.03)	0.11*** (0.03)
Disgust Sensitivity		0.09* (0.03)		0.04 (0.04)		0.08** (0.03)
Emotion Reactivity		-0.05 (0.05)		0.01 (0.06)		---
Anxiety		-0.15*** (0.04)		-0.25*** (0.05)		---
Anger		0.33*** (0.05)		0.10 (0.05)		---
Empathy		-0.12*** (0.03)		-0.10* (0.04)		---
Gender		0.01 (0.06)		0.27*** (0.08)		0.35*** (0.06)
R^2	.095	.160	.015	.097	.026	.056
ΔR^2		.065		.081		.029
F	95.56***	24.71***	10.04**	9.764***	33.60***	24.36***
ΔF		11.776***		9.585***		19.253***

664

665 *Note.* Political orientation was a continuous variable ($1 = liberal$, $5 = centrist$, $9 = conservative$).

666 Gender was coded as a dichotomous variable ($-1 = female$, $1 = male$). Standardized regression

667 coefficients are reported, with standard errors in parentheses. * $p < .05$, ** $p < .01$, *** $p < .001$.

668

669 **Table S7**

670 *Preregistered Hierarchical Regressions of Support for and Relevance of Moral Foundations on*
 671 *Pain Sensitivity (Step 1), Together with Control Predictors (Step 2), in Study 1c*

Predictor	Care/Harm		Fairness/Cheating		Loyalty/Betrayal		Authority/Subversion		Sanctity/Degradation	
	Step 1	Step 2	Step 1	Step 2	Step 1	Step 2	Step 1	Step 2	Step 1	Step 2
<i>Support for moral foundation</i>										
Pain Sensitivity	0.19***	0.15***	0.19***	0.18***	0.35***	0.24***	0.30***	0.16***	0.35***	0.19***
	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.02)	(0.03)	(0.02)	(0.03)	(0.02)
Political Orientation		-0.17***		-0.35***		0.48***		0.61***		0.47***
		(0.03)		(0.03)		(0.02)		(0.02)		(0.02)
Disgust Sensitivity		0.24***		0.16***		0.02		0.07**		0.24***
		(0.03)		(0.03)		(0.02)		(0.02)		(0.02)
Gender		-0.20***		0.03		0.40***		0.05		-0.04
		(0.06)		(0.06)		(0.05)		(0.04)		(0.05)
<i>R</i> ²	.038	.139	.035	.166	.122	.409	.085	.451	.124	.393
ΔR^2		.100		.131		.287		.366		.268
<i>F</i>	49.27	49.82	45.13	61.66	172.50	214.40	114.70	254.20	176.00	200.10
ΔF		48.13		64.85		200.67		275.41		182.41
<i>Relevance of moral foundation</i>										
Pain Sensitivity	0.02	0.00	-0.07*	-0.09**	0.31***	0.23***	0.32***	0.21***	0.29***	0.16***
	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)
Political Orientation		-0.15***		-0.22***		0.28***		0.27***		0.37***
		(0.03)		(0.03)		(0.03)		(0.03)		(0.03)
Disgust Sensitivity		0.17***		0.18***		0.09**		0.19***		0.19***
		(0.03)		(0.03)		(0.03)		(0.03)		(0.03)
Gender		-0.34***		-0.16**		0.01		-0.04		-0.10*
		(0.06)		(0.06)		(0.05)		(0.05)		(0.05)
<i>R</i> ²	.000	.092	.004	.094	.096	.180	.104	.210	.082	.249
ΔR^2		.092		.090		.083		.106		.167
<i>F</i>	.310	31.50	5.552	32.18	132.30	67.74	145.10	82.53	111.20	102.60
ΔF		41.89		40.88		41.87		55.34		91.60

672

673 *Note.* Political orientation was a continuous variable (1 = liberal, 5 = centrist, 9 = conservative).

674 Gender was coded as a dichotomous variable (-1 = female, 1 = male). Standardized regression

675 coefficients are reported, with standard errors in parentheses. * $p < .05$, ** $p < .005$, *** $p <$

676 $.001$.

677

678 **Table S8**679 *Intended and Actual Voting Preferences in Study 2a*

Voting preference	Intended voting (<i>N</i> = 1,006)	Actual voting among participants who completed the post-election survey on						
		November 4-9 (<i>N</i> = 710)	November 4 (<i>n</i> = 571)	November 5 (<i>n</i> = 70)	November 6 (<i>n</i> = 29)	November 7 (<i>n</i> = 14)	November 8 (<i>n</i> = 18)	November 9 (<i>n</i> = 8)
Trump	368 (36.6%)	257 (36.2%)	216 (37.8%)	21 (30.0%)	8 (27.6%)	6 (42.9%)	3 (16.7%)	3 (37.5%)
Biden	496 (49.3%)	387 (54.5%)	304 (53.2%)	41 (58.6%)	20 (69.0%)	7 (50.0%)	11 (61.1%)	4 (50.0%)
Others	13 (1.29%)	14 (1.97%)	8 (1.40%)	3 (4.29%)	1 (3.45%)	1 (7.14%)	1 (5.56%)	0 (0.00%)
Undecided	85 (8.45%)	7 (0.99%)	6 (1.05%)	1 (1.37%)	0 (0.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)
No one	44 (4.37%)	45 (6.34%)	37 (6.48%)	4 (5.71%)	0 (0.00%)	0 (0.00%)	3 (16.7%)	1 (12.5%)

680

681 *Note.* Count of participants and percentage within column are shown.

682

683 **Table S9**684 *Interaction Effects of Pain Sensitivity × Political Orientation on Voting or Support for Political*685 *Figures in Study 2a*

Outcome	Interaction Effect of Pain Sensitivity × Political Orientation on Outcome					Effect of Pain Sensitivity on Outcome			
	β	SE	z	df	p	Among conservatives		Among liberals	
	β	SE	t	df	p	β	p	β	p
<i>Voting (dichotomous)</i>									
Intended voting for Trump over Biden	-1.46	0.16	-9.02	861	< .001	-0.53	< .001	1.92	< .001
Actual voting for Trump over Biden	-1.06	0.21	-5.04	642	< .001	-0.37	.022	0.98	.002
<i>Voting (Likert)</i>									
Likelihood of voting for a conservative candidate	-0.08	0.02	-5.06	1001	< .001	0.01	.738	0.14	< .001
Likelihood of voting for a liberal candidate	0.11	0.02	6.53	999	< .001	0.20	< .001	-0.02	.347
<i>Support for Republican political figure (Likert)</i>									
Donald Trump	-0.14	0.02	-6.53	995	< .001	-0.03	.307	0.28	< .001
Mike Pence	-0.16	0.02	-8.12	990	< .001	-0.07	.047	0.27	< .001
Mitch McConnell	-0.13	0.02	-5.61	886	< .001	0.05	.180	0.32	< .001
Kevin McCarthy	-0.15	0.03	-4.96	566	< .001	0.02	.595	0.38	< .001
<i>Support for Democratic political figure (Likert)</i>									
Joe Biden	0.14	0.02	5.89	997	< .001	0.27	< .001	-0.02	.489
Kamala Harris	0.14	0.02	6.28	969	< .001	0.28	< .001	-0.01	.667
Bernie Sanders	0.20	0.02	9.59	993	< .001	0.26	< .001	-0.12	< .001
Elizabeth Warren	0.20	0.02	8.89	924	< .001	0.31	< .001	-0.09	.006
Nancy Pelosi	0.15	0.02	6.69	962	< .001	0.33	< .001	0.02	.627
Steny Hoyer	0.19	0.04	5.01	418	< .001	0.39	< .001	0.03	.586
Chuck Schumer	0.16	0.03	6.21	783	< .001	0.33	< .001	-0.01	.883

686 *Note.* If we used the more stringent criterion of Bonferroni-corrected $\alpha = .05 / (15 \text{ interaction}$ 687 $\text{effects of interest in Table S9} + 25 \text{ interaction effects of interest in Table S10}) = .05 / 40 =$ 688 $.00125$, all 15 interaction effects in Table S9 remained significant ($ps \leq 9.40e-7$). Graphical

689 depiction is available in Figure 5.

690

691 **Table S10**692 *Interaction Effects of Pain Sensitivity × Political Orientation on Support for Political Issues in*693 *Study 2a*

Outcome	Interaction Effect of Pain Sensitivity × Political Orientation on Outcome					Effect of Pain Sensitivity on Outcome			
						Among conservatives		Among liberals	
	β	SE	t	df	p	β	p	β	p
Illegal Immigrants Weaken the U.S. Economy †	-0.21	0.02	-8.23	1000	< .001	-0.25	< .001	0.13	.001
No Wealth Redistribution †	-0.20	0.02	-8.35	1001	< .001	-0.35	< .001	0.04	.210
The Poor Should Work Harder †	-0.19	0.03	-7.39	997	< .001	-0.28	< .001	0.11	< .001
Not Funding Stem Cell Research †	-0.19	0.03	-6.85	999	< .001	-0.21	< .001	0.18	< .001
No Universal Healthcare †	-0.19	0.02	-7.91	998	< .001	-0.31	< .001	0.08	< .001
No Impeachment of Former President Donald Trump †	-0.18	0.02	-8.61	1000	< .001	-0.24	< .001	0.18	< .001
Decrease Global Warming Restrictions †	-0.18	0.02	-7.26	1001	< .001	-0.22	< .001	0.11	< .001
No Sterile Drug Facilities †	-0.18	0.03	-6.71	1001	< .001	-0.22	< .001	0.13	< .001
ACA/Obamacare is Mistake †	-0.18	0.02	-7.72	999	< .001	-0.28	< .001	0.08	.004
No Protests †	-0.17	0.02	-7.60	1001	< .001	-0.19	< .001	0.14	< .001
Keystone Oil Pipeline	-0.17	0.03	-6.67	999	< .001	0.01	.710	0.34	< .001
Free Market †	-0.16	0.03	-5.97	998	< .001	-0.35	< .001	-0.10	.012
Abolishing Unions	-0.15	0.03	-5.53	1000	< .001	0.00	.973	0.27	< .001
Death Penalty	-0.15	0.03	-5.23	998	< .001	-0.07	.078	0.26	< .001
Gun Ownership †	-0.15	0.03	-5.91	1001	< .001	-0.30	< .001	-0.02	.534
Defense Spending	-0.14	0.03	-5.48	1000	< .001	0.14	< .001	0.42	< .001
Teaching Creationism	-0.14	0.03	-5.13	1000	< .001	0.18	< .001	0.45	< .001
No Abortion †	-0.13	0.02	-5.09	999	< .001	-0.09	.048	0.17	< .001
War in Afghanistan	-0.13	0.03	-4.16	1000	< .001	-0.02	.712	0.24	< .001
COVID Exaggerated	-0.12	0.02	-5.00	998	< .001	-0.03	.502	0.21	< .001
Illegal Marijuana †	-0.09	0.03	-3.22	995	.001	0.02	.657	0.23	< .001
Illegal to Burn Flag	-0.09	0.03	-3.31	999	< .001	0.10	.022	0.27	< .001
Torturing Terrorists	-0.08	0.03	-2.65	1001	.008	0.10	.030	0.24	< .001
Confront Terrorism	-0.05	0.03	-1.69	1001	.092	0.09	.059	0.15	< .001
No Same-Sex Marriage †	-0.04	0.03	-1.59	1001	.113	0.19	< .001	0.26	< .001

694 *Note.* Items are listed in descending order of magnitude of the interaction effect β . † denotes

695 items that have been reverse-coded. All items are coded such that higher scores represent more

696 conservative views. If we used the more stringent criterion of Bonferroni-corrected $\alpha = .05 /$

697 (15 interaction effects of interest in Table S9 + 25 interaction effects of interest in Table S10) =

698 $.05 / 40 = .00125$, 21 of the 25 interaction effects in Table S10 remained significant ($ps \leq 9.83e-$

699 4). Graphical depiction is available in Figure 6.

700

701 **Table S11**

702 *Preregistered Interaction Effects of Pain Sensitivity × Political Orientation on Voting or Support*
 703 *for Political Figures in Study 2b*

Outcome	Interaction Effect of Pain Sensitivity × Political Orientation on Outcome					Effect of Pain Sensitivity on Outcome			
	β	SE	<i>z</i>	<i>df</i>	<i>p</i>	Among conservatives		Among liberals	
	β	SE	<i>t</i>	<i>df</i>	<i>p</i>	β	<i>p</i>	β	<i>p</i>
<i>Voting (dichotomous)</i>									
Actual voting for Trump over Biden	-0.84	0.14	-5.82	780	< .001	-0.89	< .001	0.11	.675
<i>Voting (Likert)</i>									
Likelihood of voting for a conservative candidate	-0.11	0.02	-6.52	1008	< .001	0.06	.005	0.22	< .001
Likelihood of voting for a liberal candidate	0.11	0.02	5.41	1009	< .001	0.25	< .001	0.06	.024
<i>Support for Republican political figure (Likert)</i>									
Donald Trump	-0.23	0.02	-9.66	1007	< .001	-0.09	.018	0.32	< .001
Mike Pence	-0.23	0.02	-9.22	974	< .001	-0.03	.501	0.42	< .001
Mitch McConnell	-0.14	0.03	-5.33	908	< .001	0.19	< .001	0.45	< .001
Kevin McCarthy	-0.16	0.03	-5.01	645	< .001	0.11	.016	0.40	< .001
<i>Support for Democratic political figure (Likert)</i>									
Joe Biden	0.17	0.03	6.62	1008	< .001	0.50	< .001	0.19	< .001
Kamala Harris	0.21	0.03	7.95	988	< .001	0.51	< .001	0.12	< .001
Bernie Sanders	0.31	0.02	12.97	993	< .001	0.44	< .001	-0.22	< .001
Elizabeth Warren	0.24	0.03	8.70	896	< .001	0.53	< .001	0.03	.464
Nancy Pelosi	0.21	0.03	7.88	962	< .001	0.54	< .001	0.13	.003
Steny Hoyer	0.16	0.04	3.74	505	< .001	0.44	< .001	0.10	.161
Chuck Schumer	0.21	0.03	7.00	795	< .001	0.52	< .001	0.11	.035

704 *Note.* Graphical depiction is available in Figure 7.

705 **Table S12**706 *Preregistered Interaction Effects of Pain Sensitivity × Political Orientation on Support for*707 *Political Issues in Study 2b*

Outcome	Interaction Effect of Pain Sensitivity × Political Orientation on Outcome					Effect of Pain Sensitivity on Outcome			
						Among conservatives		Among liberals	
	β	SE	t	df	p	β	p	β	p
No Universal Healthcare	-0.31	0.03	-11.78	1007	< .001	-0.53	< .001	0.12	< .001
Decrease Global Warming Restrictions	-0.29	0.03	-10.87	1009	< .001	-0.43	< .001	0.17	< .001
The Poor Should Work Harder	-0.27	0.03	-10.29	1004	< .001	-0.46	< .001	0.09	.013
No Marching in Protest	-0.26	0.03	-9.62	1011	< .001	-0.42	< .001	0.06	.118
ACA/Obamacare is Mistake	-0.24	0.03	-9.02	1007	< .001	-0.51	< .001	-0.04	.287
No Sterile Drug Facilities	-0.21	0.03	-7.40	1009	< .001	-0.45	< .001	-0.07	.091
No Impeachment of Former President Donald Trump	-0.22	0.02	-8.97	1011	< .001	-0.29	< .001	0.12	< .001
No Kneeling in Protest	-0.20	0.03	-7.42	1009	< .001	-0.32	< .001	0.08	.071
Illegal Immigrants Weaken the U.S. Economy	-0.19	0.03	-7.19	1008	< .001	-0.22	< .001	0.16	< .001
Not Funding Stem Cell Research	-0.17	0.03	-5.82	1010	< .001	-0.27	< .001	0.09	.046

708 *Note.* Items are listed in descending order of magnitude of the interaction effect β . All items

709 have been reverse-coded such that higher scores represent more conservative views. Graphical

710 depiction is available in Figure 8.

711 **Table S13**712 $PH_{lib-con}$ *Toward Each Contentious Political Issue, Its Descriptive Statistics, and Its Correlation*713 *with Political Orientation in Study 3*

Political Issue	Descriptive statistics of $PH_{lib-con}$ toward political issue			Correlation between $PH_{lib-con}$ and political orientation		
	<i>n</i>	<i>M</i>	<i>SD</i>	<i>n</i>	<i>r</i>	<i>p</i>
Illegal immigrants weaken the U.S. economy	1645	-0.87	2.43	1554	0.42	< 0.001
Not funding stem cell research	1650	-0.65	2.33	1559	0.30	< 0.001
Decreasing global warming restrictions	1648	-1.94	2.38	1558	0.37	< 0.001
The poor should work harder	1651	-1.51	2.10	1560	0.39	< 0.001
ACA/ Obamacare was a mistake	1651	-1.00	2.28	1560	0.34	< 0.001
No sterile drug facilities	1648	-0.89	2.55	1558	0.28	< 0.001
No marching in protest	1645	-1.50	2.31	1554	0.36	< 0.001
No kneeling in protest	1648	-0.12	2.37	1561	0.42	< 0.001
No impeachment of Former President Donald Trump	1644	-0.66	2.66	1555	0.48	< 0.001
No universal healthcare	1651	-2.09	2.46	1560	0.41	< 0.001

714

715 *Note.* Political orientation was a continuous variable (*1 = liberal, 5 = centrist, 9 = conservative*).716 *n* = sample size, *M* = mean, *SD* = standard deviation, *r* = Pearson's correlation coefficient.

717 **Table S14**718 *Pearson's Correlation Between Pain Sensitivity and Political Orientation Among Conservatives*719 *and Among Liberals in Studies 1a–3*

Study	Correlation between pain sensitivity and political orientation					
	Among conservatives			Among liberals		
	<i>r</i>	<i>n</i>	<i>p</i>	<i>r</i>	<i>n</i>	<i>p</i>
1a	.103	404	.039	-.066	405	.183
1b	.155	288	.009	.038	287	.524
1c	.209	554	< .001	-.019	583	.642
2a	.082	434	.087	.019	455	.688
2b	.193	453	< .001	-.065	424	.182
3	.315	705	< .001	-.200	717	< .001

720

721 *Note.* Political orientation (1 = liberal, 5 = centrist, 9 = conservative).

722

723 **Table S15**724 *Standardized Regression Coefficient and Significance Level of the Interaction Effect of Pain*725 *Sensitivity × Political Orientation Before and After Adding Ideological Extremity as a Predictor*726 *to the Regression Models in Studies 1a–3*

Dependent variable	Interaction effect of pain sensitivity × political orientation			
	In the original regression model (without ideological extremity as a predictor)		In the new regression model (after adding ideological extremity as a predictor)	
	β	<i>p</i>	β	<i>p</i>
<i>Study 1a</i>				
<i>Regressing support for moral foundations on pain sensitivity × political orientation and their main effects (step 1)</i>				
Care/harm	0.071	.026	0.065	.046
Fairness/cheating	0.203	< .001	0.189	< .001
Loyalty/betrayal	-0.076	.003	-0.078	.003
Authority/subversion	-0.157	< .001	-0.152	< .001
Sanctity/degradation	-0.166	< .001	-0.157	< .001
<i>Regressing support for moral foundations on pain sensitivity × political orientation and their main effects together with control predictors (step 2)</i>				
Care/harm	0.068	.026	0.065	.037
Fairness/cheating	0.181	< .001	0.173	< .001
Loyalty/betrayal	-0.071	.006	-0.070	.008
Authority/subversion	-0.148	< .001	-0.140	< .001
Sanctity/degradation	-0.154	< .001	-0.141	< .001
<i>Regressing relevance of moral foundations on pain sensitivity × political orientation and their main effects (step 1)</i>				
Care/harm	0.106	.001	0.104	.002
Fairness/cheating	0.117	< .001	0.115	< .001
Loyalty/betrayal	-0.044	.112	-0.041	.153
Authority/subversion	-0.068	.014	-0.071	.012
Sanctity/degradation	-0.123	< .001	-0.120	< .001
<i>Regressing relevance of moral foundations on pain sensitivity × political orientation and their main effects together with control predictors (step 2)</i>				
Care/harm	0.084	.005	0.085	.006
Fairness/cheating	0.102	.001	0.102	.001
Loyalty/betrayal	-0.060	.032	-0.053	.063
Authority/subversion	-0.083	.003	-0.081	.004
Sanctity/degradation	-0.118	< .001	-0.112	< .001
<i>Study 1b</i>				
<i>Regressing support for moral foundations on pain sensitivity × political orientation and their main effects (step 1)</i>				
Care/harm	0.079	.027	0.076	.033
Fairness/cheating	0.189	< .001	0.187	< .001
Loyalty/betrayal	-0.108	< .001	-0.103	< .001
Authority/subversion	-0.158	< .001	-0.155	< .001
Sanctity/degradation	-0.138	< .001	-0.138	< .001
<i>Regressing support for moral foundations on pain sensitivity × political orientation and their main effects together with control predictors (step 2)</i>				
Care/harm	0.053	.114	0.054	.104
Fairness/cheating	0.165	< .001	0.165	< .001
Loyalty/betrayal	-0.105	< .001	-0.100	< .001
Authority/subversion	-0.162	< .001	-0.158	< .001
Sanctity/degradation	-0.141	< .001	-0.140	< .001
<i>Regressing relevance of moral foundations on pain sensitivity × political orientation and their main effects (step 1)</i>				
Care/harm	0.121	.001	0.113	.003
Fairness/cheating	0.171	< .001	0.165	< .001
Loyalty/betrayal	-0.031	.381	-0.025	.480
Authority/subversion	-0.065	.049	-0.066	.046
Sanctity/degradation	-0.060	.076	-0.062	.065
<i>Regressing relevance of moral foundations on pain sensitivity × political orientation and their main effects together with control predictors (step 2)</i>				
Care/harm	0.082	.019	0.079	.025
Fairness/cheating	0.131	< .001	0.130	< .001
Loyalty/betrayal	-0.058	.092	-0.051	.141
Authority/subversion	-0.080	.014	-0.079	.016
Sanctity/degradation	-0.072	.028	-0.072	.027

Study 1c

Regressing support for moral foundations on pain sensitivity × political orientation and their main effects (step 1)

Care/harm	0.172	< .001	0.163	< .001
Fairness/cheating	0.168	< .001	0.165	< .001
Loyalty/betrayal	-0.116	< .001	-0.119	< .001
Authority/subversion	-0.151	< .001	-0.151	< .001
Sanctity/degradation	-0.133	< .001	-0.140	< .001

Regressing support for moral foundations on pain sensitivity × political orientation and their main effects together with control predictors (step 2)

Care/harm	0.144	< .001	0.136	< .001
Fairness/cheating	0.157	< .001	0.155	< .001
Loyalty/betrayal	-0.101	< .001	-0.106	< .001
Authority/subversion	-0.157	< .001	-0.158	< .001
Sanctity/degradation	-0.158	< .001	-0.165	< .001

Regressing support for moral foundations on pain sensitivity × political orientation and their main effects together with control predictors and disgust sensitivity × political orientation (step 3)

Care/harm	0.137	< .001	0.131	< .001
Fairness/cheating	0.170	< .001	0.167	< .001
Loyalty/betrayal	-0.105	< .001	-0.109	< .001
Authority/subversion	-0.158	< .001	-0.158	< .001
Sanctity/degradation	-0.161	< .001	-0.166	< .001

Regressing relevance of moral foundations on pain sensitivity × political orientation and their main effects (step 1)

Care/harm	0.128	< .001	0.126	< .001
Fairness/cheating	0.143	< .001	0.139	< .001
Loyalty/betrayal	-0.311	.212	-0.034	.180
Authority/subversion	-0.042	.091	-0.042	.096
Sanctity/degradation	-0.074	.003	-0.082	.001

Regressing relevance of moral foundations on pain sensitivity × political orientation and their main effects together with control predictors (step 2)

Care/harm	0.099	< .001	0.099	< .001
Fairness/cheating	0.121	< .001	0.118	< .001
Loyalty/betrayal	-0.039	.122	-0.042	.103
Authority/subversion	-0.062	.012	-0.062	.014
Sanctity/degradation	-0.097	< .001	-0.104	< .001

Regressing relevance of moral foundations on pain sensitivity × political orientation and their main effects together with control predictors and disgust sensitivity × political orientation (step 3)

Care/harm	0.098	< .001	0.099	< .001
Fairness/cheating	0.132	< .001	0.129	< .001
Loyalty/betrayal	-0.043	.111	-0.045	.098
Authority/subversion	-0.060	.025	-0.059	.027
Sanctity/degradation	-0.096	< .001	-0.102	< .001

Study 2a

Interaction effects of pain sensitivity × political orientation on voting or support for political figures

Intended voting	-1.458	< .001	-1.418	< .001
Actual voting	-1.057	< .001	-1.003	< .001
Conservative candidate	-0.081	< .001	-0.082	< .001
Liberal candidate	0.110	< .001	0.112	< .001
Donald Trump	-0.138	< .001	-0.152	< .001
Mike Pence	-0.163	< .001	-0.170	< .001
Mitch McConnell	-0.135	< .001	-0.139	< .001
Kevin McCarthy	-0.154	< .001	-0.154	< .001
Joe Biden	0.135	< .001	0.143	< .001
Kamala Harris	0.140	< .001	0.146	< .001
Bernie Sanders	0.196	< .001	0.201	< .001
Elizabeth Warren	0.204	< .001	0.205	< .001
Nancy Pelosi	0.153	< .001	0.154	< .001
Steny Hoyer	0.189	< .001	0.192	< .001
Chuck Schumer	0.159	< .001	0.159	< .001

Interaction effects of pain sensitivity × political orientation on support for political issues

Illegal immigrants weaken the U.S. economy	-0.206	< .001	-0.207	< .001
No wealth redistribution	-0.200	< .001	-0.201	< .001
The poor should work harder	-0.191	< .001	-0.188	< .001
Not funding stem cell research	-0.190	< .001	-0.191	< .001
No universal healthcare	-0.189	< .001	-0.198	< .001
No impeachment of former president Donald Trump	-0.182	< .001	-0.190	< .001
Decrease global warming restrictions	-0.179	< .001	-0.186	< .001
No sterile drug facilities	-0.178	< .001	-0.178	< .001
ACA/Obamacare is mistake	-0.177	< .001	-0.185	< .001
No protests	-0.171	< .001	-0.171	< .001
Keystone oil pipeline	-0.171	< .001	-0.165	< .001
Free market	-0.162	< .001	-0.156	< .001
Abolishing unions	-0.154	< .001	-0.147	< .001

Death penalty	-0.150	< .001	-0.145	< .001
Gun ownership	-0.148	< .001	-0.152	< .001
Defense spending	-0.140	< .001	-0.142	< .001
Teaching creationism	-0.139	< .001	-0.137	< .001
No abortion	-0.127	< .001	-0.134	< .001
War in Afghanistan	-0.125	< .001	-0.118	< .001
COVID exaggerated	-0.122	< .001	-0.126	< .001
Illegal marijuana	-0.093	.001	-0.098	< .001
Illegal to burn Flag	-0.092	< .001	-0.085	.002
Torturing terrorists	-0.075	.008	-0.074	.009
Confront terrorism	-0.050	.092	-0.048	.111
No same-sex marriage	-0.043	.113	-0.051	.055

Study 2b

Interaction effects of pain sensitivity × political orientation on voting or support for political figures

Actual voting	-0.840	< .001	-0.845	< .001
Conservative candidate	-0.113	< .001	-0.118	< .001
Liberal candidate	0.108	< .001	0.114	< .001
Donald Trump	-0.228	< .001	-0.241	< .001
Mike Pence	-0.227	< .001	-0.232	< .001
Mitch McConnell	-0.140	< .001	-0.142	< .001
Kevin McCarthy	-0.164	< .001	-0.166	< .001
Joe Biden	0.171	< .001	0.177	< .001
Kamala Harris	0.206	< .001	0.209	< .001
Bernie Sanders	0.315	< .001	0.306	< .001
Elizabeth Warren	0.235	< .001	0.229	< .001
Nancy Pelosi	0.213	< .001	0.211	< .001
Steny Hoyer	0.158	< .001	0.158	< .001
Chuck Schumer	0.208	< .001	0.204	< .001

Interaction effects of pain sensitivity × political orientation on support for political issues

No universal healthcare	-0.307	< .001	-0.311	< .001
Decrease global warming restrictions	-0.294	< .001	-0.298	< .001
The poor should work harder	-0.273	< .001	-0.263	< .001
No marching in protest	-0.259	< .001	-0.259	< .001
ACA/Obamacare is mistake	-0.239	< .001	-0.243	< .001
No sterile drug facilities	-0.219	< .001	-0.204	< .001
No impeachment of former president Donald Trump	-0.218	< .001	-0.229	< .001
No kneeling in protest	-0.201	< .001	-0.205	< .001
Illegal immigrants weaken the U.S. economy	-0.193	< .001	-0.202	< .001
Not funding stem cell research	-0.171	< .001	-0.168	< .001

Study 3

Interaction effects of pain sensitivity × political orientation on perceived harm in attitudinal disagreements with moral foundations

Care/harm	-0.007	.778	-0.016	.511
Fairness/cheating	0.072	.003	0.059	.015
Loyalty/betrayal	-0.093	< .001	-0.096	< .001
Authority/subversion	-0.113	< .001	-0.114	< .001
Sanctity/degradation	-0.117	< .001	-0.123	< .001

Interaction effects of pain sensitivity × political orientation on perceived harm in behavioral violations of moral foundations

Care/harm	0.117	< .001	0.113	< .001
Fairness/cheating	0.139	< .001	-0.139	< .001
Loyalty/betrayal	-0.082	< .001	-0.089	< .001
Authority/subversion	-0.050	.014	-0.054	.010
Sanctity/degradation	-0.112	< .001	-0.115	< .001

Interaction effects of pain sensitivity × political orientation on difference in perceived harm in liberal attitude and in conservative attitude toward political issues

Decreasing global warming restrictions	-0.324	< .001	-0.328	< .001
No universal healthcare	-0.287	< .001	-0.283	< .001
No impeachment of former president Donald Trump	-0.241	< .001	-0.248	< .001
Illegal immigrants weaken the U.S. economy	-0.272	< .001	-0.275	< .001
ACA/Obamacare was a mistake	-0.288	< .001	-0.286	< .001
The poor should work harder	-0.275	< .001	-0.276	< .001
No marching in protest	-0.220	< .001	-0.218	< .001
Not funding stem cell research	-0.196	< .001	-0.202	< .001
No sterile drug facilities	-0.181	< .001	-0.184	< .001
No kneeling in protest	-0.146	< .001	-0.146	< .001

727

728 *Note.* Political orientation (1 = liberal, 5 = centrist, 9 = conservative). Ideological extremity was

729 created by coding political orientation in terms of difference from the midpoint (i.e., 1, 2, 3, 4, 5,

730 6, 7, 8, 9 became 4, 3, 2, 1, 0, 1, 2, 3, 4).

731 **Table S16**732 *Collinearity Diagnostics for Regression Analyses in Studies 1a–3*

Outcome	Predictor: Pain sensitivity × political orientation		Predictor: Pain sensitivity		Predictor: Political orientation		Condition index		
	VIF	Tolerance	VIF	Tolerance	VIF	Tolerance	OD1	OD2	OD3
<i>Study 1a</i>									
All outcomes (support for or relevance of each moral foundation)	16.72	0.06	5.47	0.18	8.92	0.11	1.50	1.80	8.14
<i>Study 1b</i>									
All outcomes (support for or relevance of each moral foundation)	11.92	0.08	4.53	0.22	7.21	0.14	1.44	1.54	6.77
<i>Study 1c</i>									
All outcomes (support for or relevance of each moral foundation)	12.64	0.08	4.17	0.24	7.95	0.13	1.46	1.59	7.00
<i>Study 2a</i>									
Voting for a Conservative Candidate	11.37	0.09	4.31	0.23	7.45	0.13	1.42	1.47	6.60
Voting for a Liberal Candidate	11.39	0.09	4.33	0.23	7.44	0.13	1.42	1.47	6.60
Support for Donald Trump	11.38	0.09	4.33	0.23	7.43	0.13	1.42	1.47	6.60
Support for Mike Pence	11.38	0.09	4.28	0.23	7.50	0.13	1.42	1.47	6.60
Support for Mitch McConnell	11.30	0.09	4.19	0.24	7.37	0.14	1.42	1.49	6.58
Support for Kevin McCarthy	11.55	0.09	4.42	0.23	7.46	0.13	1.42	1.59	6.83
Support for Joe Biden	11.36	0.09	4.30	0.23	7.46	0.13	1.42	1.47	6.59
Support for Kamala Harris	11.43	0.09	4.26	0.23	7.52	0.13	1.42	1.47	6.62
Support for Bernie Sanders	11.30	0.09	4.30	0.23	7.41	0.13	1.42	1.47	6.57
Support for Elizabeth Warren	11.49	0.09	4.25	0.24	7.59	0.13	1.42	1.48	6.63
Support for Nancy Pelosi	11.32	0.09	4.27	0.23	7.42	0.13	1.42	1.47	6.58
Support for Steny Hoyer	12.79	0.08	4.44	0.23	8.42	0.12	1.40	1.82	7.44
Support for Chuck Schumer	11.37	0.09	4.24	0.24	7.39	0.14	1.43	1.50	6.62
Illegal Immigrants Weaken the U.S. Economy	11.37	0.09	4.31	0.23	7.45	0.13	1.42	1.47	6.60
No Wealth Redistribution	11.37	0.09	4.31	0.23	7.45	0.13	1.42	1.47	6.60
The Poor Should Work Harder	11.41	0.09	4.31	0.23	7.45	0.13	1.42	1.47	6.61
Not Funding Stem Cell Research	11.39	0.09	4.31	0.23	7.46	0.13	1.42	1.47	6.60
No Universal Healthcare	11.34	0.09	4.30	0.23	7.44	0.13	1.42	1.47	6.59
No Impeachment of Former President Donald Trump	11.35	0.09	4.31	0.23	7.43	0.13	1.42	1.47	6.59
Decreasing Global Warming Restrictions	11.37	0.09	4.31	0.23	7.45	0.13	1.42	1.47	6.60
ACA/Obamacare Was a Mistake	11.37	0.09	4.32	0.23	7.45	0.13	1.42	1.47	6.60
No Sterile Drug Facilities	11.37	0.09	4.31	0.23	7.45	0.13	1.42	1.47	6.60
No Protesting	11.37	0.09	4.31	0.23	7.45	0.13	1.42	1.47	6.60
Keystone Oil Pipeline	11.37	0.09	4.30	0.23	7.47	0.13	1.42	1.47	6.60
Free Market	11.50	0.09	4.36	0.23	7.49	0.13	1.42	1.47	6.64
Abolishing Unions	11.35	0.09	4.31	0.23	7.44	0.13	1.42	1.47	6.59
Death Penalty	11.40	0.09	4.33	0.23	7.46	0.13	1.42	1.47	6.61
Right to Own Guns	11.37	0.09	4.31	0.23	7.45	0.13	1.42	1.47	6.60
Increasing Defence Spending	11.37	0.09	4.31	0.23	7.45	0.13	1.42	1.47	6.60
Teaching Creationism	11.34	0.09	4.30	0.23	7.45	0.13	1.42	1.47	6.59
Not Permitting Abortion	11.37	0.09	4.32	0.23	7.43	0.13	1.42	1.47	6.60
War in Afghanistan	11.35	0.09	4.31	0.23	7.43	0.13	1.42	1.47	6.59
Response to COVID-19 Has Been Exaggerated	11.36	0.09	4.31	0.23	7.43	0.13	1.42	1.47	6.59
No Legalization of Marijuana	11.33	0.09	4.31	0.23	7.42	0.13	1.42	1.47	6.58
Criminalizing Flag-Burning	11.40	0.09	4.31	0.23	7.46	0.13	1.42	1.47	6.61
Torture on Suspected Terrorist	11.37	0.09	4.31	0.23	7.45	0.13	1.42	1.47	6.60
Confronting Terrorism	11.37	0.09	4.31	0.23	7.45	0.13	1.42	1.47	6.60
Not Permitting Same-Sex Marriage	11.37	0.09	4.31	0.23	7.45	0.13	1.42	1.47	6.60
<i>Study 2b</i>									
Voting for a Conservative Candidate	14.50	0.07	5.03	0.20	8.88	0.11	1.45	1.57	7.51
Voting for a Liberal Candidate	14.51	0.07	5.02	0.20	8.88	0.11	1.45	1.57	7.51
Support for Donald Trump	14.49	0.07	5.04	0.20	8.85	0.11	1.45	1.57	7.50
Support for Mike Pence	14.75	0.07	5.11	0.20	8.97	0.11	1.45	1.57	7.57
Support for Mitch McConnell	14.62	0.07	4.96	0.20	9.00	0.11	1.45	1.58	7.54
Support for Kevin McCarthy	15.92	0.06	5.29	0.19	10.15	0.10	1.49	1.68	8.23
Support for Joe Biden	14.49	0.07	5.01	0.20	8.90	0.11	1.45	1.56	7.50
Support for Kamala Harris	14.82	0.07	5.10	0.20	9.02	0.11	1.45	1.58	7.59
Support for Bernie Sanders	14.42	0.07	5.00	0.20	8.83	0.11	1.45	1.57	7.48
Support for Elizabeth Warren	14.61	0.07	4.93	0.20	8.97	0.11	1.45	1.59	7.54
Support for Nancy Pelosi	14.94	0.07	5.19	0.19	9.07	0.11	1.45	1.57	7.62
Support for Steny Hoyer	18.49	0.05	5.46	0.18	12.43	0.08	1.54	1.92	9.48
Support for Chuck Schumer	14.91	0.07	5.28	0.19	9.16	0.11	1.48	1.57	7.73
No Universal Healthcare	14.54	0.07	5.03	0.20	8.89	0.11	1.45	1.57	7.52
Decreasing Global Warming Restrictions	14.59	0.07	5.06	0.20	8.89	0.11	1.45	1.57	7.53
The Poor Should Work Harder	14.56	0.07	5.05	0.20	8.88	0.11	1.45	1.57	7.52
The Poor Should Work Harder	14.56	0.07	5.05	0.20	8.88	0.11	1.45	1.57	7.52
No Marching in Protest	14.51	0.07	5.03	0.20	8.88	0.11	1.45	1.57	7.51

ACA/Obamacare Was a Mistake	14.53	0.07	5.06	0.20	8.86	0.11	1.45	1.57	7.51
No Sterile Drug Facilities	14.48	0.07	5.02	0.20	8.88	0.11	1.45	1.56	7.50
No Impeachment of Former President Donald Trump	14.51	0.07	5.03	0.20	8.88	0.11	1.45	1.57	7.51
No Kneeling in Protest	14.48	0.07	5.02	0.20	8.87	0.11	1.45	1.56	7.50
Illegal Immigrants Weaken the U.S. Economy	14.51	0.07	5.03	0.20	8.87	0.11	1.45	1.57	7.51
Not Funding Stem Cell Research	14.54	0.07	5.05	0.20	8.91	0.11	1.45	1.56	7.52
<i>Study 3</i>									
All outcomes related to moral foundations (support for or relevance of each moral foundation)	12.52	0.08	3.93	0.25	7.97	0.13	1.46	1.62	6.97
Decreasing Global Warming Restrictions	12.54	0.08	3.93	0.25	7.97	0.13	1.46	1.62	6.98
No Universal Healthcare	12.50	0.08	3.93	0.25	7.95	0.13	1.46	1.62	6.96
No Impeachment of Former President Donald Trump	12.52	0.08	3.93	0.25	7.97	0.13	1.46	1.62	6.97
Illegal Immigrants Weaken the U.S. Economy	12.54	0.08	3.91	0.26	8.00	0.12	1.46	1.62	6.98
ACA/Obamacare Was a Mistake	12.51	0.08	3.93	0.25	7.97	0.13	1.46	1.62	6.97
The Poor Should Work Harder	12.52	0.08	3.94	0.25	7.94	0.13	1.46	1.62	6.97
No Marching in Protest	12.55	0.08	3.94	0.25	7.98	0.13	1.46	1.62	6.98
Not Funding Stem Cell Research	12.48	0.08	3.92	0.25	7.95	0.13	1.46	1.62	6.96
No Sterile Drug Facilities	12.52	0.08	3.93	0.25	7.97	0.13	1.46	1.62	6.97
No Kneeling in Protest	12.52	0.08	3.93	0.25	7.97	0.13	1.46	1.62	6.97

733

734 *Note.* VIF = variance inflation factor. Tolerance = 1 / VIF. OD = orthogonal dimension extracted

735 from principal components analysis. For each outcome (i.e., in each row), the largest condition

736 index is also known as the condition number (i.e., the square root of the ratio of the largest

737 eigenvalue to the smallest eigenvalue among all orthogonal dimensions extracted from principal

738 components analysis).

739 **Table S17**740 *Reliability Coefficient and Descriptive Statistics of Scales in Studies 1a–1c*

Variables	Study 1a			Study 1b			Study 1c		
	α	<i>M</i>	<i>SD</i>	α	<i>M</i>	<i>SD</i>	α	<i>M</i>	<i>SD</i>
<i>Support for Moral Foundation</i>									
Care/Harm	0.49	3.53	0.97	0.48	3.57	0.97	0.48	3.50	0.97
Fairness/Cheating	0.35	3.37	0.93	0.38	3.38	0.90	0.35	3.32	0.87
Loyalty/Betrayal	0.64	2.74	1.14	0.63	2.42	1.19	0.63	2.37	1.17
Authority/Subversion	0.66	3.08	1.13	0.73	3.04	1.22	0.70	2.99	1.19
Sanctity/Degradation	0.80	2.79	1.36	0.75	2.66	1.34	0.75	2.56	1.33
<i>Relevance of Moral Foundation</i>									
Care/Harm	0.73	3.63	0.99	0.72	3.70	0.92	0.69	3.67	0.90
Fairness/Cheating	0.76	3.63	1.02	0.75	3.78	0.90	0.71	3.80	0.85
Loyalty/Betrayal	0.77	2.60	1.21	0.69	2.76	1.10	0.70	2.68	1.07
Authority/Subversion	0.68	2.73	1.10	0.64	2.76	1.02	0.64	2.77	0.99
Sanctity/Degradation	0.75	2.57	1.35	0.62	2.73	1.21	0.65	2.67	1.21
Pain Sensitivity	0.95	4.81	2.05	0.95	4.18	1.81	0.95	4.06	1.72
Disgust Sensitivity	0.78	0.58	0.16	0.82	0.56	0.17	0.87	2.22	0.64
Emotion Reactivity	0.96	2.37	0.73	0.95	2.34	0.67	-	-	-
Anger	0.94	2.03	0.69	0.91	1.92	0.55	-	-	-
Anxiety	0.95	2.07	0.57	0.96	2.10	0.53	-	-	-
Empathy	0.91	4.19	0.67	0.91	4.16	0.64	-	-	-

741

742 *Note.* α = reliability coefficient (Cronbach's alpha), *M* = mean, *SD* = standard deviation. All

743 scale reliabilities resemble prior research, including the lower reliabilities of Support for

744 Care/Harm and Fairness/Cheating in the Moral Foundations Questionnaire (Graham et al., 2011).

745 **Table S18**746 *Incoherent Pattern of Interaction Effects of Pain Sensitivity × Political Orientation on Attitudes*747 *Toward Political Issues in Study 2a if Reverse-Wording and Reverse-Scoring Were Ignored*

Political issues	β when reverse-wording and reverse-scoring were properly considered	β if reverse-wording and reverse-scoring were ignored
Illegal Immigrants Weaken the U.S. Economy †	-0.21	0.21
No Wealth Redistribution †	-0.20	0.20
The Poor Should Work Harder †	-0.19	0.19
Not Funding Stem Cell Research †	-0.19	0.19
No Universal Healthcare †	-0.19	0.19
No Impeachment of Former President Donald Trump †	-0.18	0.18
Decreasing Global Warming Restrictions †	-0.18	0.18
No Sterile Drug Facilities †	-0.18	0.18
ACA/Obamacare was a Mistake †	-0.18	0.18
No Protests †	-0.17	0.17
Keystone Oil Pipeline	-0.17	-0.17
Free Market †	-0.16	0.16
Abolishing Unions	-0.15	-0.15
Death Penalty	-0.15	-0.15
Gun Ownership †	-0.15	0.15
Defense Spending	-0.14	-0.14
Teaching Creationism	-0.14	-0.14
No Abortion †	-0.13	0.13
War in Afghanistan	-0.13	-0.13
COVID Exaggerated	-0.12	-0.12
Illegal Marijuana †	-0.09	0.09
Illegal to Burn Flag	-0.09	-0.09
Torturing Terrorists	-0.08	-0.08
Confront Terrorism	-0.05	-0.05
No Same-Sex Marriage †	-0.04	0.04

748

749 *Note.* Items are listed in descending order of magnitude of the interaction effect of pain

750 sensitivity × political orientation in Study 2a. † denotes items that were reverse-worded and thus

751 should be reverse-coded (so higher scores should always represent more conservative views).

752

753 **Table S19**754 *Zero-Order Correlations in Studies 1a–1b*

Variable	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
1. Pain Sensitivity	1.00	.29***	.32***	.43***	.34***	.39***	.04	.07	.33***	.39***	.32***	.13***	.35***	.27***	-.01	.23***	.13***
2. Support for Care	.22***	1.00	.47***	.13***	.11**	.20***	.42***	.37***	.21***	.24***	.20***	-.12**	.32***	.19***	.02	.02	.35***
3. Support for Fairness	.28***	.44***	1.00	-.01	-.11**	.00	.32***	.43***	.11**	.09*	.02	-.30***	.21***	.29***	.14***	.14***	.25***
4. Support for Loyalty	.53***	.15***	.15***	1.00	.63***	.61***	-.08*	-.13***	.49***	.52***	.44***	.49***	.17***	.04	-.21***	.08*	-.04
5. Support for Authority	.40***	.07*	.05	.61***	1.00	.66***	-.05	-.11**	.43***	.59***	.53***	.59***	.15***	-.02	-.25***	.02	.02
6. Support for Sanctity	.43***	.15***	.12***	.63***	.63***	1.00	.03	-.05	.46***	.59***	.70***	.51***	.30***	.07	-.17***	.06	.04
7. Relevance of Care	.03	.46***	.35***	-.03	-.03	.05	1.00	.68***	.31***	.27***	.30***	-.14***	.15***	.15***	.02	.04	.38***
8. Relevance of Fairness	.04	.36***	.41***	-.08**	-.07*	-.03	.68***	1.00	.22***	.23***	.20***	-.20***	.14***	.18***	.03	.06	.38***
9. Relevance of Loyalty	.48***	.18***	.15***	.61***	.50***	.55***	.16***	.09**	1.00	.61***	.56***	.26***	.19***	.16***	-.06	.20***	.17***
10. Relevance of Authority	.49***	.18***	.15***	.59***	.57***	.62***	.18***	.15***	.71***	1.00	.65***	.34***	.28***	.11**	-.14***	.10**	.13***
11. Relevance of Sanctity	.46***	.15***	.09**	.58***	.57***	.77***	.14***	.04	.65***	.66***	1.00	.39***	.28***	.11**	-.13**	.13***	.09*
12. Political Orientation	.30***	-.13***	-.18***	.50***	.49***	.49***	-.20***	-.20***	.39***	.41***	.46***	1.00	.02	-.08*	-.22***	.00	-.12**
13. Disgust Sensitivity	.36***	.22***	.16***	.30***	.28***	.40***	.10**	.06	.34***	.33***	.41***	.16***	1.00	.21***	.07	.05	.20***
14. Emotion Reactivity	.48***	.11***	.16***	.29***	.19***	.26***	-.04	-.08*	.35***	.32***	.31***	.19***	.29***	1.00	.54***	.65***	.24***
15. Anxiety	.23***	-.02	.02	.06	-.05	.06	-.08*	-.09**	.16***	.10**	.11***	.07*	.11***	.66***	1.00	.49***	.06
16. Anger	.54***	-.01	.11***	.33***	.22***	.27***	-.11***	-.10**	.37***	.35***	.31***	.32***	.19***	.73***	.61***	1.00	.03
17. Empathy	.18***	.37***	.35***	.11**	.12***	.12***	.43***	.34***	.16***	.16***	.15***	-.06	.17***	.19***	-.03	.02	1.00

755

756 *Note.* Political orientation was a continuous variable (*1 = liberal, 5 = centrist, 9 = conservative*). Study 1a correlation coefficients are757 below the diagonal, Study 1b correlation coefficients above it. * $p < .05$, ** $p < .01$, *** $p < .001$.

758 **Table S20**759 *Results of Psychophysical Validation Study as a Function of How the Level 1 Predictor*760 *(Objective Pressure Amount) and Level 2 Predictor (PSQ Score) Were Analyzed*

Results	Model 1	Model 2	Model 3	Model 4
<i>Model summary</i>				
How was OPA analyzed?	Grand standardized (level 1)	Grand mean-centered (level 1)	Standardized within participant (level 1); participant-level mean being standardized between participants (level 2)	Mean-centered within participant (level 1); participant-level mean being mean-centered between participants (level 2)
How was PSQ score analyzed?	Standardized	Mean-centered	Standardized	Mean-centered
<i>Basic model statistics</i>				
Random intercept				
var	3,129.90	3218.09	185.67	183.93
SD	55.95	56.73	13.63	13.56
95% CI of SD	50.80, 61.28	50.80, 61.28	12.38, 14.82	12.38, 14.82
Random slope of OPA				
var	845.92	0.1151	944.02	0.1368
SD	29.09	0.3393	30.73	0.3605
95% CI of SD	26.07, 32.19	0.3023, 0.3733	27.51, 34.06	0.3190, 0.3950
<i>r</i> between random intercept and random slope				
<i>r</i>	.54	.55	-.08	-.08
95% CI of <i>r</i>	.4336, .6355	.4336, .6355	-.2275, .0712	-.2275, .0712
<i>Primary results</i>				
Main effect of PSQ score (level 2)				
β	15.472	10.934	3.012	2.128
SE	3.516	2.517	0.874	0.615
df	230.841	222.787	253.266	256.677
<i>t</i>	4.401	4.334	3.446	3.463
<i>p</i>	1.65e-05	2.12e-05	.0007	.0006
<i>R</i> ²	.077	.078	.045	.045
Main effect of OPA (level 1)				
β	65.344	0.7588	68.659	0.7963
SE	1.929	0.0225	2.0527	0.0238
df	215.616	213.0150	207.874	208.133
<i>t</i>	33.875	33.746	33.448	33.469
<i>p</i>	< 2e-16	< 2e-16	< 2e-16	< 2e-16
<i>R</i> ²	.842	.842	.843	.843
Interaction effect of PSQ score (level 2) × OPA (level 1)				
β	4.822	0.0396	5.314	0.0435
SE	1.936	0.0159	2.060	0.0169
df	215.279	212.703	208.234	208.490
<i>t</i>	2.490	2.483	2.580	2.581
<i>p</i>	.0135	.0138	.0106	.0105
<i>R</i> ²	.028	.028	.031	.031
Main effect of OPA (level 2)				
β	-	-	1.290	0.0171
SE	-	-	0.883	0.0116
df	-	-	257.507	260.856
<i>t</i>	-	-	1.461	1.475
<i>p</i>	-	-	.1452	.1413
<i>R</i> ²	-	-	.008	.008
Interaction effect of PSQ score (level 2) × OPA (level 2)				
β	-	-	-0.1477	-0.0014
SE	-	-	0.8113	0.0075
df	-	-	254.206	257.492
<i>t</i>	-	-	-0.182	-0.184
<i>p</i>	-	-	.8557	.8541
<i>R</i> ²	-	-	.000	.000

762 *Note.* OPA = objective pressure amount. PSQ = pain sensitivity questionnaire. *var* = variance.
763 *SD* = standard deviation. 95% CI = 95% confidence interval. *r* = Pearson's correlation
764 coefficient. A positive (or negative) *r* between random intercept and random slope indicated that
765 participants with a higher intercept in subjective pain intensity tended to show a more positive
766 (or negative) association between objective pressure amount and subjective pain intensity.
767 When OPA was standardized or mean-centered within participant (models 3–4), each
768 participant's mean was reintroduced as a level 2 predictor into the multilevel model so that both
769 within-participant and between-participant effects of OPA could be separately investigated
770 (Enders & Tofighi, 2007). This step of reintroducing each participant's mean was unnecessary
771 when OPA was grand standardized or grand mean-centered (models 1–2).
772

773 **Table S21**774 *Zero-Order Correlations in Study 1c*

Variable	1	2	3	4	5	6	7	8	9	10	11	12	13
1. Pain Sensitivity	1.00												
2. Support for Care/Harm	.19***	1.00											
3. Support for Fairness/Cheating	.19***	.46***	1.00										
4. Support for Loyalty/Betrayal	.34***	.05	-.06*	1.00									
5. Support for Authority/Subversion	.29***	-.01	-.14***	.69***	1.00								
6. Support for Sanctity/Degradation	.35***	.15***	.01	.58***	.66***	1.00							
7. Relevance of Care/Harm	.02	.41***	.33***	-.14***	-.09**	.01	1.00						
8. Relevance of Fairness/Cheating	-.06*	.33***	.36***	-.24***	-.18***	-.14***	.62***	1.00					
9. Relevance of Loyalty/Betrayal	.31***	.11***	.08**	.47***	.47***	.48***	.23***	.10	1.00				
10. Relevance of Authority/Subversion	.32***	.17***	.10***	.46***	.55***	.55***	.27***	.18	.61***	1.00			
11. Relevance of Sanctity/Degradation	.29***	.13***	.02	.44***	.54***	.69***	.22***	.07*	.57***	.64***	1.00		
12. Political Orientation	.17***	-.13***	-.30***	.56***	.65***	.52***	-.16***	-.23	.33***	.32***	.41***	1.00	
13. Disgust Sensitivity	.37***	.30***	.19***	.12***	.18***	.36***	.19***	.13	.20***	.30***	.30***	.10***	1.00

775

776 *Note.* Political orientation was a continuous variable (1 = liberal, 5 = centrist, 9 = conservative). * $p < .05$, ** $p < .01$, *** $p < .001$.

777

778 **Table S22**779 *Political Issues and Their Scale Labels and Descriptive Statistics in Studies 2a–2b*

Issues and scale labels	Reverse-scored?	Study 2a			Study 2b		
		<i>n</i>	<i>M</i>	<i>SD</i>	<i>n</i>	<i>M</i>	<i>SD</i>
“Please select the attitude that comes closest to your views on ___.”							
abortion (1 = Abortion should not be permitted at all; 3 = Abortion should be against the law except in cases of rape, incest and to save the woman's life; 5 = Abortion should be available but under stricter limits than it is now; 7 = Abortion should be generally available to those who want it)	Yes	1005	3.05	2.13	-	-	-
defence spending (1 = The federal government should decrease its defence spending; 4 = The federal government should maintain its current defence spending; 7 = The federal government should increase its defence spending)	No	1006	3.65	1.80	-	-	-
teaching intelligent design/creationism (1 = Public schools should only teach the theory of evolution; 4 = Public schools should teach intelligent design/creationism along with evolution; 7 = Public schools should only teach intelligent design/creationism (instead of evolution))	No	1006	3.35	1.91	-	-	-
illegal immigrants (1 = Illegal immigrants do more to weaken the US economy overall because they do not all pay taxes but can use public services; 7 = Illegal immigrants do more to strengthen the US economy overall because they provide low-cost labor and they spend money)	Yes	1006	3.73	2.16	1022	3.82	1.94
terrorism (1 = In the long run, the US will be safer from terrorism if it stays out of other countries' affairs in the Middle East; 7 = In the long run, the US will be safer from terrorism if it confronts the countries and troops that promote terrorism in the Middle East)	No	1007	3.86	1.97	-	-	-
torture (1 = It is NEVER justified to use forceful interrogation techniques/torture to get information from a suspected terrorist; 4 = It is SOMETIMES justified to use forceful interrogation techniques/torture to get information from a suspected terrorist; 7 = It is OFTEN justified to use forceful interrogation techniques/torture to get information from a suspected terrorist)	No	1007	3.23	1.79	-	-	-
stem cell research (1 = The federal government should NOT fund research that would use newly created stem cells obtained from human embryos; 7 = The federal government should fund research that would use newly created stem cells obtained from human embryos)	Yes	1005	3.13	2.04	1024	3.16	1.83
flag-burning (1 = I oppose a constitutional amendment that would make it illegal to burn the American flag; 7 = I favour a constitutional amendment that would make it illegal to burn the American flag)	No	1005	3.85	2.43	-	-	-
gun control legislation (1 = When it comes to gun control legislation, I think it is more important to protect the right of Americans to own guns; 7 = When it comes to gun control legislation, I think it is more important to control gun ownership)	Yes	1007	3.61	2.32	-	-	-
global warming (1 = The government should decrease the current restrictions because global warming is a theory that has not yet been proven; 4 = The restrictions that are currently in place are sufficient to reduce the effects of global warming; 7 = The government should increase restrictions on emissions from cars and industrial facilities such as power plants and factories in an attempt to reduce the effects of global warming)	Yes	1007	2.65	1.92	1023	2.42	1.64
same-sex couples (1 = Same-sex couples should NOT be allowed to marry nor have civil unions; 4 = Same-sex couples should be allowed to have a civil union, but not to marry; 7 = Same-sex couples should be allowed to legally marry)	Yes	1007	2.59	2.16	-	-	-
the response to COVID-19 (1 = The government is not doing enough to fight COVID-19; 4 = The government is doing enough to fight COVID-19; 7 = The response of the society to COVID-19 has been exaggerated)	No	1004	3.09	2.09	-	-	-
economic regulation (1 = The economic market will naturally correct itself; 7 = The federal government must regulate the economy)	Yes	1004	3.45	1.75	-	-	-

social welfare (1 = The poor should learn to work harder; 7 = Social programs serve a valuable role in our society)	Yes	1003	2.58	1.68	1018	2.59	1.52
the Affordable Care Act (ObamaCare) (1 = The passage of the Affordable Care Act (ObamaCare) was a great mistake in American history; 3 = The Supreme Court should find the Affordable Care Act (Obama Care) unconstitutional; 5 = The Affordable Care Act (Obama Care) should continue to go into effect over the next few years; 7 = The passage of the Affordable Care Act (ObamaCare) was a great moment in American history)	Yes	1005	3.42	2.03	1020	3.20	1.71

“Please rate the extent to which you support or oppose each of the following:”

(-3 = strongly oppose, -2 = oppose, -1 = somewhat oppose, 0 = neither oppose nor support, 1 = somewhat support, 2 = support, 3 = strongly support)

Government funded facilities that provide sterile supplies (clean needles, sterile water for injections) to drug users	Yes	1007	-0.58	2.08	1023	-0.82	1.87
Legalization of marijuana	Yes	1001	-1.31	1.92	-	-	-
Wealth redistribution	Yes	1007	-0.60	2.13	-	-	-
War in Afghanistan	No	1006	-0.95	1.78	-	-	-
[Different forms of protesting]	Yes	1007	-0.72	1.65	-	-	-
Marching in a protest (e.g., Black Lives Matter, Occupy Wall Street)	Yes	1007	-0.93	2.05	1024	-1.05	1.80
Kneeling during the national anthem	Yes	1007	-0.21	2.25	1023	-0.04	1.97
Going on strike	Yes	1004	-1.02	1.60	-	-	-
Abolishing unions	No	1006	-0.70	1.84	-	-	-
Impeachment of President Donald Trump	Yes	1006	-0.37	2.50	1025	-0.59	2.20
Universal health care	Yes	1004	-1.29	2.09	1021	-1.71	1.65
Keystone Oil Pipeline	No	1005	-0.24	1.85	-	-	-
Death penalty	No	1004	0.24	2.02	-	-	-

780

781 *Note.* Some items were reverse-scored such that on all items, higher scores would indicate more

782 conservative attitudes. Different forms of protesting were analyzed as a single issue in Study 2a.

783 Two forms of protesting were included and analyzed separately in Study 2b as preregistered. $n =$ 784 sample size, $M =$ mean (after reverse-scoring where relevant), $SD =$ standard deviation.

785 **Table S23**786 *Generic Voting Likelihood Items and Their Scale Labels and Descriptive Statistics in Studies 2a–*787 *2b*

Items and scale labels	Study 2a			Study 2b		
	<i>n</i>	<i>M</i>	<i>SD</i>	<i>n</i>	<i>M</i>	<i>SD</i>
“How likely are you to vote for.....” (<i>extremely unlikely, moderately unlikely, slightly unlikely, neither likely nor unlikely, slightly likely, moderately likely, extremely likely</i>) scored 1 to 7						
A Liberal Political Candidate	1005	4.26	2.35	1023	4.26	2.06
A Conservative Political Candidate	1007	4.01	2.32	1022	4.34	2.04
An Independent Political Candidate	1007	4.26	1.65	1021	4.52	1.44

788

789 *Note.* *n* = sample size, *M* = mean, *SD* = standard deviation.

790 **Table S24**791 *Support for Political Figures in Studies 2a–2b*

Political Figure	Study 2a				Study 2b			
	<i>n</i>	α	<i>M</i>	<i>SD</i>	<i>n</i>	α	<i>M</i>	<i>SD</i>
Donald Trump (President, Republican)	1001	0.98	3.44	2.45	1020	0.97	3.35	2.14
Mike Pence (Vice President, Republican)	996	0.99	3.50	2.33	986	0.97	3.55	1.90
Mitch McConnell (Senate Majority Leader, Republican)	892	0.98	3.06	1.97	921	0.97	3.23	1.79
Kevin McCarthy (House Minority Leader, Republican)	570	0.98	3.61	1.88	657	0.95	3.80	1.69
Joe Biden (Presidential candidate, Democrat)	1003	0.97	3.90	2.20	1022	0.97	4.41	1.95
Kamala Harris (Vice Presidential candidate, Democrat)	975	0.98	3.80	2.22	1002	0.96	4.06	1.89
Nancy Pelosi (Speaker of the House of Representatives, Democrat)	968	0.98	3.57	2.22	976	0.97	3.68	1.88
Steny Hoyer (House Majority Leader, Democrat)	424	0.97	4.06	1.69	515	0.93	4.12	1.41
Chuck Schumer (Senate Minority Leader, Democrat)	789	0.98	3.68	2.00	806	0.96	3.79	1.70
Bernie Sanders (former presidential primary candidate, Democrat)	999	0.97	4.17	2.19	1006	0.96	4.44	1.83
Elizabeth Warren (former presidential primary candidate, Democrat)	930	0.98	3.97	2.11	908	0.96	4.05	1.75

792

793 *Note.* Participants were asked to “Please indicate the degree to which you agree or disagree with

794 each of the following statements regarding ____.” Three statements were used for each political

795 figure (e.g., “I support Donald Trump,” “I approve of Donald Trump’s performance in the

796 administration of his job,” and “I support the political issues that Donald Trump stands for”).

797 Response options included *I do not know this person, strongly disagree, disagree, somewhat*798 *disagree, neither agree nor disagree, somewhat agree, agree, and strongly agree*, which were

799 scored 1 to 7 after excluding participants who indicated “I do not know this person.” For context,

800 this table provides the role and party affiliation of each political figure at the time of data

801 collection. In the actual survey, only the name of the political figure was shown, not the

802 information in parentheses. *n* = sample size, α = reliability coefficient (Cronbach’s alpha) of the803 three items, *M* = mean, *SD* = standard deviation.

804 **Table S25**805 *Hypothetical Voting Preference in Study 2a*

Hypothetical voting preference	Pre-election survey	Post-election survey
Donald Trump	200	136
Bernie Sanders	174	128
Joe Biden	98	54
Barack Obama	62	59
Elizabeth Warren	51	37
Andrew Yang	34	18
Don't know / unsure / undecided	34	16
Mike Pence	23	16
Michelle Obama	17	14
No one	17	6
Someone else (based on ideology)	16	3
Hillary Clinton	14	9
Me	14	8
Tulsi Gabbard	12	6
Kamala Harris	11	6
Pete Buttigieg	10	8
Ted Cruz	10	6
Alexandria Ocasio-Cortez	8	13
Ben Carson	8	4
Dwayne Johnson	8	1
Ron Paul	8	3
Mitt Romney	6	2
Rand Paul	6	3
A Republican other than Donald Trump	5	2
Andrew Cuomo	5	3
Arnold Schwarzenegger	5	2
Ben Shapiro	5	2
Bill Gates	5	1
Candace Owens	5	4
Nikki Haley	5	3
Ronald Reagan	5	5
Amy Coney Barrett	4	
Elon Musk	4	2
Mark Cuban	4	3
Condoleezza Rice	3	3
Family/ friend	3	3
Jimmy Carter	3	
Jo Jorgensen	3	5
John Kasich	3	3
Kanye West	3	6
Patrick Buchanan	3	2
Tucker Carlson	3	2
A non career politician	2	
Ben Sasse	2	
Bill Clinton	2	2
Dan Crenshaw	2	5
George Washington	2	1
Howie Hawkins	2	1
Michael Bloomberg	2	5
Mike Huckabee	2	2
Oprah Winfrey	2	6
Theodore Roosevelt	2	1
A Democrat	1	
A Kennedy	1	
A Republican	1	
A younger candidate	1	2
Adam Schiff	1	
Al Gore	1	
Allen West	1	
Amy Klobuchar	1	1
Angela Merkel	1	
Anthony Fauci	1	1
Any Democrat	1	
Anyone other than Biden or Trump	1	
Bill Bradley	1	
C. Stephen Evans	1	
Carly Fiorina	1	
Charlie Baker	1	1
Chris Christie	1	
Chuck Schumer	1	
Clark Howard	1	
Colin Powell	1	1

Hypothetical voting preference	Pre-election survey	Post-election survey
Cory Booker	1	
David Nunes	1	
Dwight Eisenhower	1	
Ellen DeGeneres	1	
Evan McMullin	1	
Franklin Roosevelt	1	
Gavin Newsom	1	
George Bush	1	
Grady Judd	1	1
Hank Williams Jr.	1	1
Hayley Kiyoko	1	
Homer Simpson	1	1
Ice Cube	1	1
Ivanka Trump	1	2
James Agnew	1	
James Corbett	1	1
James Woods	1	
Jared Polis	1	
Jay Inslee	1	1
Jeb Bush	1	
Jeffrey Sachs	1	
Jesus	1	8
Jim Carrey	1	
Jim Jordan	1	2
Jim Webb	1	1
John Boehner	1	1
John F. Kennedy	1	2
John James	1	1
John MacArthur	1	
John Maxwell	1	
John McCain	1	
John Morgan	1	
John Smith	1	
Jordan Peterson	1	1
Katie Porter	1	
Keanu Reeves	1	
Kimberly Klacik	1	
Lesser of two evils	1	
Libertarian candidate	1	
Lil Wayne	1	
Lindsey Graham	1	1
Lisa Murkowski	1	
Marco Rubio	1	3
Martin Luther King	1	
Michael Dukakis	1	
Mike Ditka	1	
Mike Pompeo	1	
Mike Rowe	1	
Mimi Soltysik	1	1
Misha Collins	1	1
Mitch Daniels	1	1
Nancy Pelosi	1	1
Nate Silver	1	
Phil Murphy	1	
Rashida Tlaib	1	
Rick Scott	1	
Rob Portman	1	
Robert Kennedy	1	1
Ron DeSantis	1	1
Ross Perot	1	3
Rush Limbaugh	1	3
Russell M. Nelson	1	
Sam Elliott	1	
Snoop Dogg	1	1
Stacey Abrams	1	2
Steve Bullock	1	
Superman	1	
Tom Fitton	1	
Tony Perkins	1	
Waldo	1	
Willie Nelson	1	

806

807 *Note.* Participants were asked the following open-ended questions in the pre- and post-election
808 surveys, respectively: “Hypothetically, imagine you could vote for anyone in the upcoming
809 presidential election, regardless of whether they are currently in the running. Who would you
810 vote for?” (pre-election survey); “Hypothetically, imagine you could vote for anyone in the 2020
811 presidential election, regardless of whether they were or were not actually in the running. Who
812 would you vote for?” (post-election survey). Responses are sorted here in descending order of
813 frequency in the pre-election survey; ties are sorted in alphabetical order.

814

815 **Table S26**816 *Items for Measuring Perceived Harm in Attitudinal Disagreements with and Behavioral*817 *Violations of Moral Foundations and Their Scale Labels and Descriptive Statistics in Study 3*

Items	Moral foundations (not shown to participants)	<i>n</i>	<i>M</i>	<i>SD</i>
<i>Perceived harm in attitudinal disagreements with moral foundations</i>				
“Please read the following descriptions and indicate the extent to which you perceive harm in each of the views.” (0 = no harm at all, 1 = very mild harm, 2 = mild harm, 3 = moderate harm, 4 = severe harm, 5 = very severe harm)				
Person A DISAGREES with the following statement: "Compassion for those who are suffering is the most crucial virtue." To what extent do you perceive harm in Person A's view?	Care/harm	1652	2.53	1.52
Person B DISAGREES with the following statement: "When the government makes laws, the number one principle should be ensuring that everyone is treated fairly." To what extent do you perceive harm in Person B's view?	Fairness/cheating	1653	2.82	1.61
Person C DISAGREES with the following statement: "I am proud of my country's history." To what extent do you perceive harm in Person C's view?	Loyalty/betrayal	1653	1.69	1.63
Person D DISAGREES with the following statement: "Respect for authority is something all children need to learn." To what extent do you perceive harm in Person D's view?	Authority/subversion	1646	2.26	1.57
Person E DISAGREES with the following statement: "People should not do things that are disgusting, even if no one is harmed." To what extent do you perceive harm in Person E's view?	Sanctity/degradation	1650	1.93	1.5
Person F DISAGREES with the following statement: "It is better to do good than to do bad." To what extent do you perceive harm in Person F's view?	Not applicable (filler)	1654	3.00	1.71
Person G DISAGREES with the following statement: "One of the worst things a person could do is hurt a defenceless animal." To what extent do you perceive harm in Person G's view?	Care/harm	1654	2.91	1.62
Person H DISAGREES with the following statement: "Justice is the most important requirement for a society." To what extent do you perceive harm in Person H's view?	Fairness/cheating	1650	2.58	1.59
Person I DISAGREES with the following statement: "People should be loyal to their family members, even when they have done something wrong." To what extent do you perceive harm in Person I's view?	Loyalty/betrayal	1655	1.81	1.52
Person J DISAGREES with the following statement: "Men and women each have different roles to play in society." To what extent do you perceive harm in Person J's view?	Authority/subversion	1652	1.68	1.58
Person K DISAGREES with the following statement: "I would call some acts wrong on the grounds that they are unnatural." To what extent do you perceive harm in Person K's view?	Sanctity/degradation	1646	1.82	1.41
Person L DISAGREES with the following statement: "It can never be right to kill a human being." To what extent do you perceive harm in Person L's view?	Care/harm	1653	2.71	1.73
Person M DISAGREES with the following statement: "I think it's morally wrong that rich children inherit a lot of money while poor children inherit nothing." To what extent do you perceive harm in Person M's view?	Fairness/cheating	1653	1.75	1.48
Person N DISAGREES with the following statement: "It is more important to be a team player than to express oneself." To what extent do you perceive harm in Person N's view?	Loyalty/betrayal	1654	1.72	1.39
Person O DISAGREES with the following statement: "If I were a soldier and disagreed with my commanding officer's orders, I would obey anyway because that is my duty." To what extent do you perceive harm in Person O's view?	Authority/subversion	1657	2.18	1.45
Person P DISAGREES with the following statement: "Chastity is an important and valuable virtue." To what extent do you perceive harm in Person P's view?	Sanctity/degradation	1650	1.64	1.58

Perceived harm in behavioral violations of moral foundations

“Please read the following sentences and indicate the extent to which you perceive harm in each of them.”
(0 = no harm at all, 1 = very mild harm, 2 = mild harm, 3 = moderate harm, 4 = severe harm, 5 = very severe harm)

Someone suffered emotionally.	Care/harm	1652	3.29	1.19
Some people were treated differently than others.	Fairness/cheating	1655	3.34	1.15
Someone’s action did not show love for his or her country.	Loyalty/betrayal	1654	2.11	1.59
Someone showed a lack of respect for authority	Authority/subversion	1655	2.63	1.32
Someone violated standards of purity and decency.	Sanctity/degradation	1657	2.46	1.53
Someone was good at math.	Not applicable (filler)	1654	0.58	1.28
Someone did not care for someone weak or vulnerable.	Care/harm	1655	3.30	1.16
Someone acted unfairly.	Fairness/cheating	1650	3.01	1.14
Someone did something to betray his or her group.	Loyalty/betrayal	1655	3.00	1.20
Someone did not conform to the traditions of society.	Authority/subversion	1649	1.82	1.46
Someone did something disgusting.	Sanctity/degradation	1653	2.44	1.42
Someone was cruel.	Care/harm	1643	3.66	1.11
Someone was denied his or her rights.	Fairness/cheating	1653	3.94	1.10
Someone showed a lack of loyalty.	Loyalty/betrayal	1652	2.75	1.26
An action caused chaos or disorder.	Authority/subversion	1653	3.50	1.14
Someone acted in a way that God would not approve of.	Sanctity/degradation	1655	2.17	1.78

818

819 *Note.* n = sample size, M = mean, SD = standard deviation.

820 **Table S27**821 *Items for Measuring Perceived Harm in Liberal Attitude and in Conservative Attitude Toward*822 *Contentious Political Issues and Their Scale Labels and Descriptive Statistics in Study 3*

Items	Political issues and attitudes toward them (not shown to participants)	<i>n</i>	<i>M</i>	<i>SD</i>
"Please read the following descriptions and indicate the extent to which you perceive harm in each of the views." (0 = no harm at all, 1 = very mild harm, 2 = mild harm, 3 = moderate harm, 4 = severe harm, 5 = very severe harm)				
Person A AGREES with the following statement: "Illegal immigrants do more to weaken the US economy overall because they do not all pay taxes but can use public services." To what extent do you perceive harm in Person A's view?	Illegal immigrants; conservative attitude	1651	2.34	1.59
Person B AGREES with the following statement: "Illegal immigrants do more to strengthen the US economy overall because they provide low-cost labor and they spend money." To what extent do you perceive harm in Person B's view?	Illegal immigrants; liberal attitude	1652	1.46	1.50
Person C AGREES with the following statement: "The federal government should NOT fund research that would use newly created stem cells obtained from human embryos." To what extent do you perceive harm in Person C's view?	Stem cell research; conservative attitude	1653	2.06	1.54
Person D AGREES with the following statement: "The federal government should fund research that would use newly created stem cells obtained from human embryos." To what extent do you perceive harm in Person D's view?	Stem cell research; liberal attitude	1655	1.41	1.51
Person E AGREES with the following statement: "The government should decrease the current restrictions because global warming is a theory that has not yet been proven." To what extent do you perceive harm in Person E's view?	Global warming; conservative attitude	1652	2.96	1.68
Person F AGREES with the following statement: "The government should increase restrictions on emissions from cars and industrial facilities such as power plants and factories in an attempt to reduce the effects of global warming." To what extent do you perceive harm in Person F's view?	Global warming; liberal attitude	1654	1.03	1.38
Person G AGREES with the following statement: "The poor should learn to work harder." To what extent do you perceive harm in Person G's view?	Social welfare; conservative attitude	1656	2.36	1.66
Person H AGREES with the following statement: "Social programs serve a valuable role in our society." To what extent do you perceive harm in Person H's view?	Social welfare; liberal attitude	1652	0.85	1.23
Person I AGREES with the following statement: "The passage of the Affordable Care Act (ObamaCare) was a great mistake in American history." To what extent do you perceive harm in Person I's view?	Affordable Care Act; conservative attitude	1653	2.19	1.59
Person J AGREES with the following statement: "The passage of the Affordable Care Act (ObamaCare) was a great moment in American history." To what extent do you perceive harm in Person J's view?	Affordable Care Act; conservative attitude	1656	1.20	1.45
Person K SUPPORTS government funded facilities that provide sterile supplies (clean needles, sterile water for injections) to drug users. To what extent do you perceive harm in Person K's view?	Drug facilities; liberal attitude	1653	1.34	1.52
Person L OPPOSES government funded facilities that provide sterile supplies (clean needles, sterile water for injections) to drug users. To what extent do you perceive harm in Person L's view?	Drug facilities; conservative attitude	1652	2.23	1.59
Person M SUPPORTS marching in a protest (e.g., Black Lives Matter, Occupy Wall Street). To what extent do you perceive harm in Person M's view?	Marching in protest; liberal attitude	1650	0.94	1.32
Person N OPPOSES marching in a protest (e.g., Black Lives Matter, Occupy Wall Street). To what extent do you perceive harm in Person N's view?	Marching in protest; conservative attitude	1652	2.44	1.65

Person O SUPPORTS kneeling during the national anthem. To what extent do you perceive harm in Person O's view?	Kneeling in protest; liberal attitude	1653	1.40	1.61
Person P OPPOSES kneeling during the national anthem. To what extent do you perceive harm in Person P's view?	Kneeling in protest; conservative attitude	1653	1.52	1.59
Person Q SUPPORTS the impeachment of former President Donald Trump. To what extent do you perceive harm in Person Q's view?	Impeachment of Trump; liberal attitude	1652	1.41	1.64
Person R OPPOSES the impeachment of former President Donald Trump. To what extent do you perceive harm in Person R's view?	Impeachment of Trump; conservative attitude	1650	2.07	1.76
Person S SUPPORTS universal health care. To what extent do you perceive harm in Person S's view?	Universal health care; liberal attitude	1655	0.83	1.31
Person T OPPOSES universal health care. To what extent do you perceive harm in Person T's view?	Universal health care; conservative attitude	1653	2.92	1.66

823

824 *Note.* n = sample size, M = mean, SD = standard deviation.

825

826 **Table S28**827 *Items for Measuring Lay Intuitions Regarding the Political Attitudes of a Pain-Sensitive Person*828 *in Study 4*

Issues and scale labels			<i>n</i>	<i>M</i>	<i>SD</i>
<p>“On the issue of [X], to what extent do you think the views of a [person] with high sensitivity to physical pain (compared with a [person] with low sensitivity to physical pain) are closer to one of the following attitudes?” <i>(1 = Much closer to A, 2 = Moderately closer to A, 3 = Slightly closer to A, 4 = About equally between A and B, 5 = Slightly closer to B, 6 = Moderately closer to B, 7 = Much closer to B)</i></p>					
[X]	Attitude A	Attitude B			
illegal immigrants	Illegal immigrants do more to weaken the US economy overall because they do not all pay taxes but can use public services.	Illegal immigrants do more to strengthen the US economy overall because they provide low-cost labor and they spend money.	716	3.60	1.80
stem cell research	The federal government should NOT fund research that would use newly created stem cells obtained from human embryos.	The federal government should fund research that would use newly created stem cells obtained from human embryos.	720	3.88	1.74
global warming	The government should decrease the current restrictions because global warming is a theory that has not yet been proven.	The government should increase restrictions on emissions from cars and industrial facilities such as power plants and factories in an attempt to reduce the effects of global warming.	721	3.26	1.83
social welfare	The poor should learn to work harder.	Social programs serve a valuable role in our society.	721	3.30	1.89
Affordable Care Act (ObamaCare)	The passage of the Affordable Care Act (ObamaCare) was a great mistake in American history.	The passage of the Affordable Care Act (ObamaCare) was a great moment in American history.	722	3.39	1.85
<p>“Please indicate the extent to which you think each of the following issues is likely to be more supported or opposed by a [person] with high sensitivity to physical pain (compared with a [person] with low sensitivity to physical pain)” <i>(-3 = opposed much more, -2 = opposed moderately more, -1 = opposed slightly more, 0 = supported or opposed about equally, +1 = supported slightly more, +2 = supported moderately more, +3 = supported much more)</i></p>					
Impeachment of President Donald Trump			723	-0.29	1.93
Kneeling during the national anthem			724	-0.13	1.74
Universal health care			721	-0.95	1.77
Government funded facilities that provide sterile supplies (clean needles, sterile water for injections) to drug users			723	-0.58	1.72
Marching in a protest (e.g., Black Lives Matter, Occupy Wall Street)			724	-0.42	1.82

829

830 *Note.* Five issues used a 7-point scale that ranged between two issue-specific attitudes. Five831 issues used an issues-general 7-point scale. *n* = sample size, *M* = mean, *SD* = standard deviation.

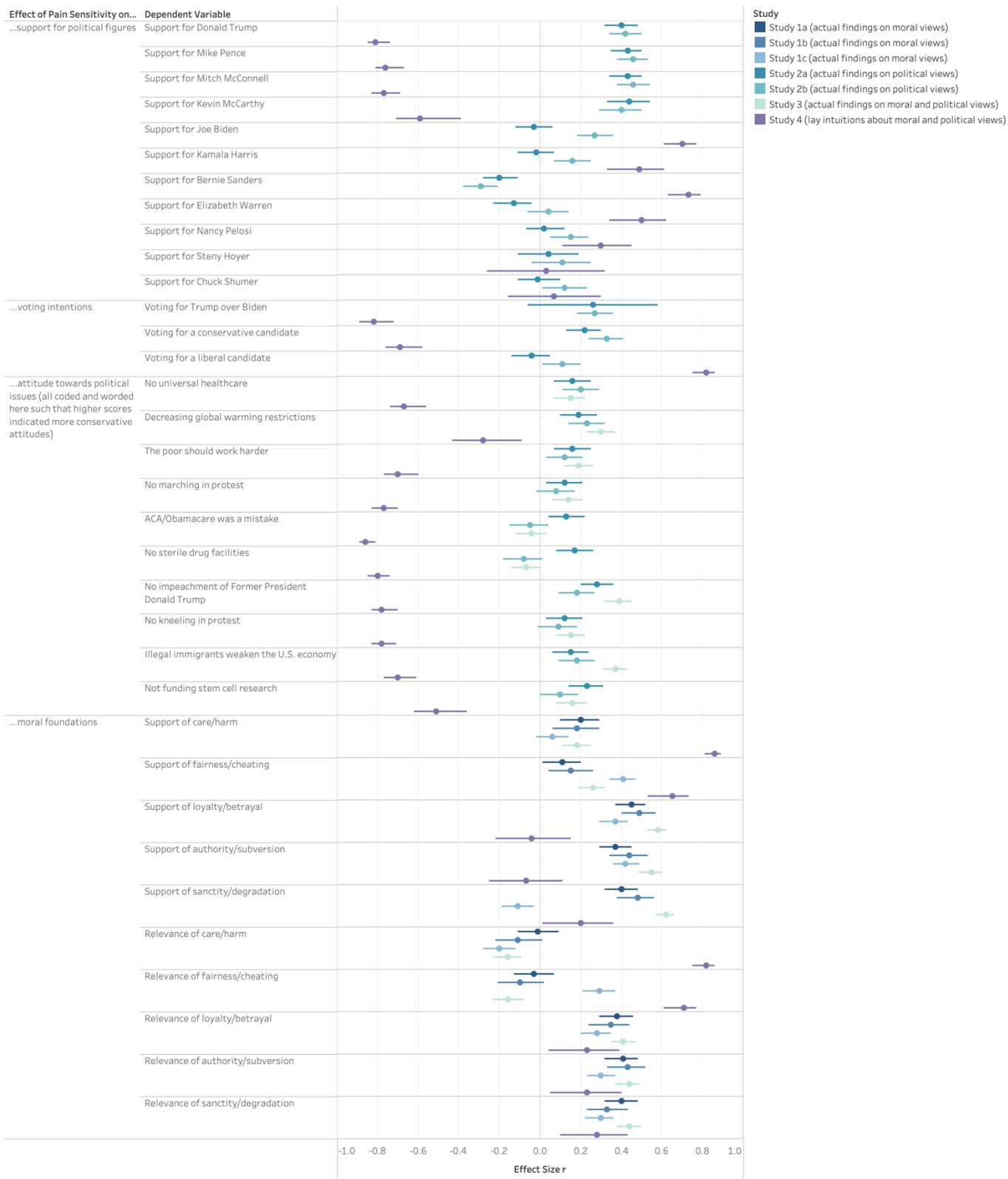
832

833

SUPPLEMENTAL FIGURES834 **Figure S1**835 *Actual Effects of Pain Sensitivity in Studies 1a–3 versus Lay Intuitions about Pain Sensitivity*836 *When the Target's Political Orientation Was Inferred in Study 4*

837 a

Liberal participants in Studies 1-3 and participants in the "target's political orientation unspecified" condition who inferred the target to be liberal in Study 4



838

839 **b**

Conservative participants in Studies 1-3 and participants in the "target's political orientation unspecified" condition who inferred the target to be conservative in Study 4

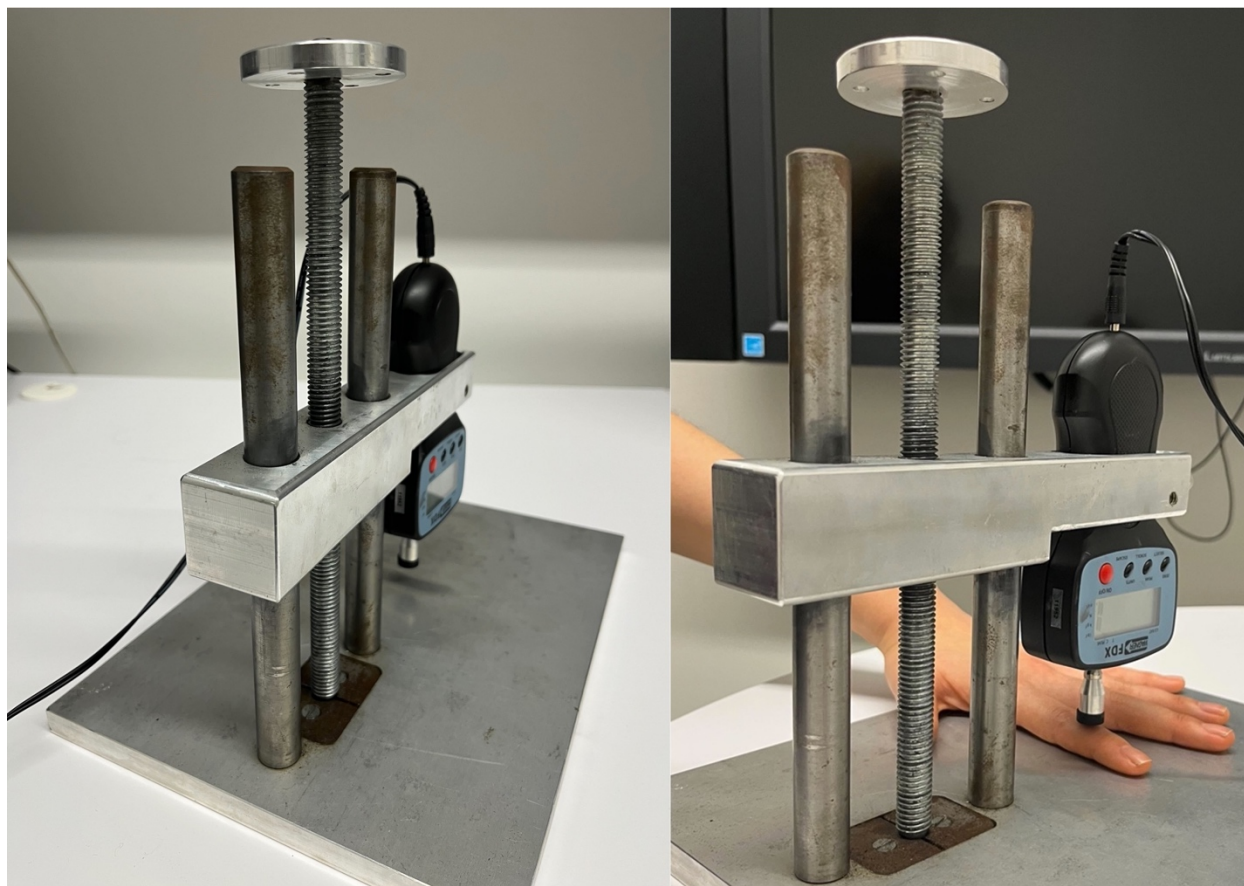


840

841 *Note.* **(a)** Actual effects of pain sensitivity among liberal participants in Studies 1a, 1b, 1c, 2a,
842 2b, and 3 ($ns = 406, 287, 583, 455, 424,$ and 717) versus lay intuitions about pain sensitivity for a
843 target inferred as liberal in Study 4 ($n = 110$). **(b)** Actual effects of pain sensitivity among
844 conservative participants in Studies 1a, 1b, 1c, 2a, 2b, and 3 ($ns = 404, 288, 554, 434, 456,$ and
845 705) versus lay intuitions about pain sensitivity for a target inferred as conservative in Study 4 (n
846 = 48). To facilitate comparison, all actual effects and lay intuitions were converted to the same
847 metric of effect size, r . Error bars represent 95% confidence interval.
848

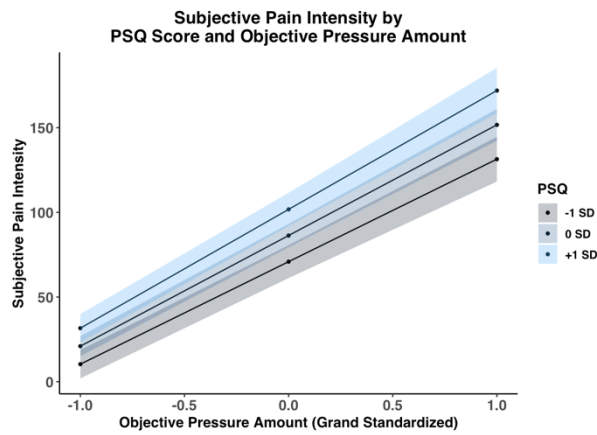
849 **Figure S2**

850 *Pressure Algometer for Pain Induction in Psychophysical Validation Study*

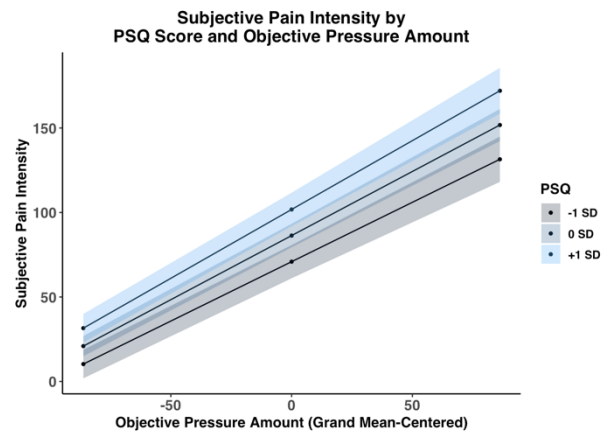
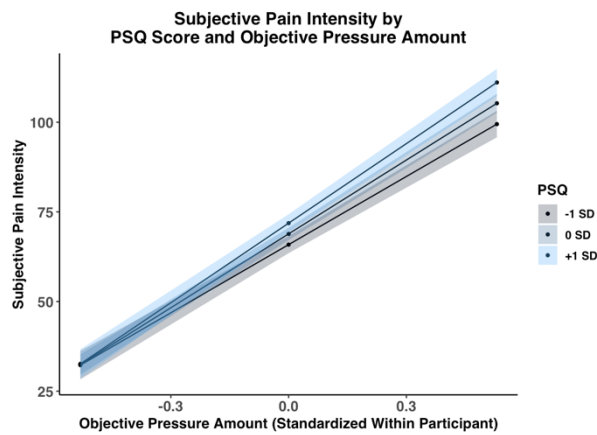


851

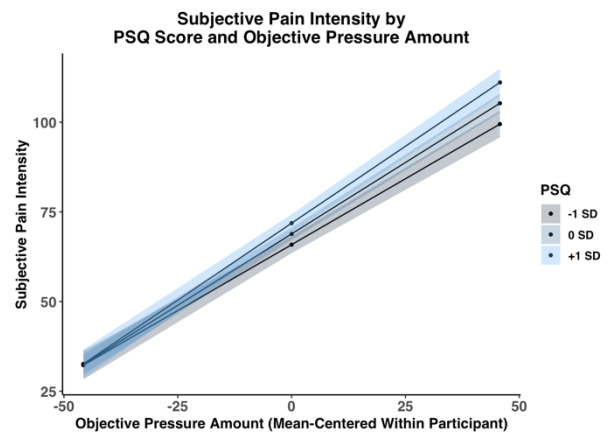
852

853 **Figure S3**854 *Effects of PSQ Score (Level 2), Objective Pressure Amount (Level 1), and Their Interaction*855 *(Cross-Level) on Subjective Pain Intensity in Psychophysical Validation Study*856 **a**

857

b858 **c**

859

d

860

861 *Note. (a) Model 1. (b) Model 2. (c) Model 3. (d) Model 4. 95% confidence intervals are shown*862 *around the lines for three levels of PSQ scores (M minus 1 SD ; M ; M plus 1 SD).*

863

864 SUPPLEMENTAL REFERENCES

- 865 Aguinis, H., Gottfredson, R. K., & Culpepper, S. A. (2013). Best-Practice Recommendations for
866 Estimating Cross-Level Interaction Effects Using Multilevel Modeling. *Journal of*
867 *Management*, 39(6), 1490–1528. <https://doi.org/10.1177/0149206313478188>
- 868 Bates, D., Maechler, M., Bolker, B., & Walker, S. (2022). *lme4: Linear mixed-effects models*
869 *using “Eigen” and S4* (1.1-28) [R]. [https://cran.r-](https://cran.r-project.org/web/packages/lme4/index.html)
870 [project.org/web/packages/lme4/index.html](https://cran.r-project.org/web/packages/lme4/index.html)
- 871 Brennum, J., Kjeldsen, M., Jensen, K., & Jensen, T. S. (1989). Measurements of human
872 pressure-pain thresholds on fingers and toes. *Pain*, 38(2), 211–217.
873 [https://doi.org/10.1016/0304-3959\(89\)90240-6](https://doi.org/10.1016/0304-3959(89)90240-6)
- 874 Camerer, C. F., Dreber, A., Holzmeister, F., Ho, T.-H., Huber, J., Johannesson, M., Kirchler, M.,
875 Nave, G., Nosek, B. A., Pfeiffer, T., Altmejd, A., Buttrick, N., Chan, T., Chen, Y.,
876 Forsell, E., Gampa, A., Heikensten, E., Hummer, L., Imai, T., ... Wu, H. (2018).
877 Evaluating the replicability of social science experiments in Nature and Science between
878 2010 and 2015. *Nature Human Behaviour*, 2(9), 637–644.
879 <https://doi.org/10.1038/s41562-018-0399-z>
- 880 Christie, N. C., Hsu, E., Iskiwitch, C., Iyer, R., Graham, J., Schwartz, B., & Monterosso, J. R.
881 (2019). The Moral Foundations of Needle Exchange Attitudes. *Social Cognition*, 37(3),
882 229–246. <https://doi.org/10.1521/soco.2019.37.3.229>
- 883 Day, M. V., Fiske, S. T., Downing, E. L., & Trail, T. E. (2014). Shifting Liberal and
884 Conservative Attitudes Using Moral Foundations Theory. *Personality and Social*
885 *Psychology Bulletin*, 40(12), 1559–1573. <https://doi.org/10.1177/0146167214551152>

- 886 Enders, C. K., & Tofighi, D. (2007). Centering predictor variables in cross-sectional multilevel
887 models: A new look at an old issue. *Psychological Methods, 12*(2), 121–138.
888 <https://doi.org/10.1037/1082-989X.12.2.121>
- 889 Feinberg, M., & Willer, R. (2015). From Gulf to Bridge: When Do Moral Arguments Facilitate
890 Political Influence? *Personality and Social Psychology Bulletin, 41*(12), 1665–1681.
891 <https://doi.org/10.1177/0146167215607842>
- 892 Franks, A. S., & Scherr, K. C. (2019). Economic Issues Are Moral Issues: The Moral
893 Underpinnings of the Desire to Reduce Wealth Inequality. *Social Psychological and*
894 *Personality Science, 10*(4), 553–562. <https://doi.org/10.1177/1948550618772821>
- 895 Frimer, J. A., Tell, C. E., & Motyl, M. (2017). Sacralizing Liberals and Fair-Minded
896 Conservatives: Ideological Symmetry in the Moral Motives in the Culture War:
897 Ideological Symmetry. *Analyses of Social Issues and Public Policy, 17*(1), 33–59.
898 <https://doi.org/10.1111/asap.12127>
- 899 Graham, J., Nosek, B. A., Haidt, J., Iyer, R., Koleva, S., & Ditto, P. H. (2011). Mapping the
900 moral domain. *Journal of Personality and Social Psychology, 101*(2), 366–385.
901 <https://doi.org/10.1037/a0021847>
- 902 Haidt, J., McCauley, C., & Rozin, P. (1994). Individual differences in sensitivity to disgust: A
903 scale sampling seven domains of disgust elicitors. *Personality and Individual*
904 *Differences, 16*(5), 701–713. [https://doi.org/10.1016/0191-8869\(94\)90212-7](https://doi.org/10.1016/0191-8869(94)90212-7)
- 905 Inbar, Y., Pizarro, D. A., & Bloom, P. (2009). Conservatives are more easily disgusted than
906 liberals. *Cognition & Emotion, 23*(4), 714–725.
907 <https://doi.org/10.1080/02699930802110007>

- 908 Jorgensen, T. D., Pornprasertmanit, S., Miller, P., & Schoemann, A. (2021). *simsem: Simulated*
909 *structural equation modeling* (0.5-16) [R]. [https://cran.r-](https://cran.r-project.org/web/packages/simsem/index.html)
910 [project.org/web/packages/simsem/index.html](https://cran.r-project.org/web/packages/simsem/index.html)
- 911 Kinser, A. M., Sands, W. A., & Stone, M. H. (2009). Reliability and Validity of a Pressure
912 Algometer. *Journal of Strength and Conditioning Research*, 23(1), 312–314.
913 <https://doi.org/10.1519/JSC.0b013e31818f051c>
- 914 Koleva, S. P., Graham, J., Iyer, R., Ditto, P. H., & Haidt, J. (2012). Tracing the threads: How
915 five moral concerns (especially Purity) help explain culture war attitudes. *Journal of*
916 *Research in Personality*, 46(2), 184–194. <https://doi.org/10.1016/j.jrp.2012.01.006>
- 917 Kuznetsova, A., Brockhoff, P. B., & Christensen, R. H. B. (2020). *lmerTest: Tests in linear*
918 *mixed effects models* (3.1-3) [R].
- 919 Monroe, A. E., Wyngaarden, J. B., & Plant, E. A. (2020). “They should have followed the rules”:
920 Trade-offs Between Fairness and Authority Values Predict Judgments of Social Justice
921 Protests. *Social Psychological and Personality Science*, 194855062092385.
922 <https://doi.org/10.1177/1948550620923854>
- 923 Nock, M. K., Wedig, M. M., Holmberg, E. B., & Hooley, J. M. (2008). The Emotion Reactivity
924 Scale: Development, Evaluation, and Relation to Self-Injurious Thoughts and Behaviors.
925 *Behavior Therapy*, 39(2), 107–116. <https://doi.org/10.1016/j.beth.2007.05.005>
- 926 Olatunji, B. O., Williams, N. L., Tolin, D. F., Abramowitz, J. S., Sawchuk, C. N., Lohr, J. M., &
927 Elwood, L. S. (2007). The Disgust Scale: Item analysis, factor structure, and suggestions
928 for refinement. *Psychological Assessment*, 19(3), 281–297. [https://doi.org/10.1037/1040-](https://doi.org/10.1037/1040-3590.19.3.281)
929 [3590.19.3.281](https://doi.org/10.1037/1040-3590.19.3.281)

- 930 Qian, K., & Yahara, T. (2020). Mentality and behavior in COVID-19 emergency status in Japan:
931 Influence of personality, morality and ideology. *PLOS ONE*, *15*(7), e0235883.
932 <https://doi.org/10.1371/journal.pone.0235883>
- 933 R Core Team. (2022). *R: A language and environment for statistical computing* (4.1.3) [R; R
934 Foundation for Statistical Computing]. <https://www.R-project.org/>
- 935 Reniers, R. L. E. P., Corcoran, R., Drake, R., Shryane, N. M., & Völlm, B. A. (2011). The
936 QCAE: A Questionnaire of Cognitive and Affective Empathy. *Journal of Personality*
937 *Assessment*, *93*(1), 84–95. <https://doi.org/10.1080/00223891.2010.528484>
- 938 Rosseel, Y., Jorgensen, T. D., & Rockwood, N. (2022). *lavaan: Latent variable analysis* (0.6-10)
939 [R]. <https://cran.r-project.org/web/packages/lavaan/index.html>
- 940 Ruscheweyh, R., Marziniak, M., Stumpfenhorst, F., Reinholz, J., & Knecht, S. (2009). Pain
941 sensitivity can be assessed by self-rating: Development and validation of the Pain
942 Sensitivity Questionnaire. *Pain*, *146*(1), 65–74.
943 <https://doi.org/10.1016/j.pain.2009.06.020>
- 944 Ruscheweyh, R., Verneuer, B., Dany, K., Marziniak, M., Wolowski, A., Çolak-Ekici, R.,
945 Schulte, T. L., Bullmann, V., Grewe, S., Gralow, I., Evers, S., & Knecht, S. (2012).
946 Validation of the Pain Sensitivity Questionnaire in chronic pain patients. *Pain*, *153*(6),
947 1210–1218. <https://doi.org/10.1016/j.pain.2012.02.025>
- 948 Sellers, A. B., Ruscheweyh, R., Kelley, B. J., Ness, T. J., & Vetter, T. R. (2013). Validation of
949 the English Language Pain Sensitivity Questionnaire. *Regional Anesthesia and Pain*
950 *Medicine*, *38*(6), 508–514. <https://doi.org/10.1097/AAP.0000000000000007>
- 951 Spielberger, C. D. (2012). *State-Trait Anxiety Inventory for Adults* [Data set]. American
952 Psychological Association. <https://doi.org/10.1037/t06496-000>

- 953 Spielberger, C. D., Jacobs, G., Russell, S., & Crane, R. S. (1983). Assessment of anger: The
954 State-Trait Anger Scale. In J. N. Butcher & C. D. Spielberger (Eds.), *Advances in*
955 *personality assessment* (Vol. 2, pp. 159–187). Erlbaum.
- 956 van Overveld, M., de Jong, P. J., Peters, M. L., & Schouten, E. (2011). The Disgust Scale-R: A
957 valid and reliable index to investigate separate disgust domains? *Personality and*
958 *Individual Differences*, 51(3), 325–330. <https://doi.org/10.1016/j.paid.2011.03.023>
959