Appendix for “Fear or Loathing: Affect, Economics and Prejudice”

# A1. Replication of manuscript experiment

To provide greater confidence in our experimental results, we include here an additional survey experiment. For this study (Study A2), we conducted a similar experiment to Study 2 in the text using Mturk. The questions on prejudice in the prior survey came after a lengthy battery of questions regarding cultural attitudes (which we present in another paper). This may have weakened our results as treatment effects declined over time. To correct for this, and to enhance confidence in our findings with a replication, we conducted an additional study on Amazon’s Mechanical Turk (MTurk) in April 2019. A total of 577 respondents[[1]](#endnote-1) participated in this study, which took approximately 8 minutes to complete. This study also included additional dimensions of prejudice. Participants in this study were randomly assigned to the same 3 experimental conditions as in study 2, and asked their emotional response in the same way, via the PANAS-M measure of emotions. Results for emotional responses are presented in Figure 2 below. As shown, the effects of the treatments on emotions are quite similar to study 2, where each treatment elicited both more anger and fear than the control condition, and the threat treatment elicited the highest level of fear, while the grievance treatment elicited the highest level of anger.

## Figure A2: Anger and Fear by Treatment (Mturk).



## Table A2. Anger, Fear and Ethnocentrism – Study A2

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | Republicans | Democrats | Republicans | Democrats |
| Crisis: Threat | -0.631\*\* (0.260) | -0.159 (0.188) | -0.722\*\* (0.285) | -0.248 (0.220) |
| Crisis: Grievance | -0.071 (0.258) | -0.060 (0.199) | -0.302 (0.285) | -0.102 (0.229) |
| Anger |  |  | 0.297\*\* (0.133) | -0.066 (0.089) |
| Fear |  |  | -0.029 (0.149) | 0.118 (0.115) |
| Constant | 0.674\*\*\* (0.182) | -0.177 (0.134) | 0.833\*\*\* (0.207) | -0.143 (0.146) |
| N | 157 | 232 | 157 | 232 |
| *R*2 | 0.0435 | 0.0032 | 0.0743 | 0.0081 |

Table entries are OLS coefficients with standard errors in parentheses. Analyses restricted to white respondents only.\* p<0.1, \*\* p<0.05, \*\*\* p<0.01

We first use study A2 to replicate key findings from Study 2. All variables are measured and coded as in study 2. To start, we look at ethnocentrism, presented in Table 2. Here, we actually see that one of the treatments for Republicans, is signed in the opposite direction of predictions and results from study 2: that is, threat makes Republicans *less* ethnocentric, relative to the control. However, when looking at emotional responses, we see a similar effect to study 2: Republicans who feel anger become more ethnocentric. For Democrats, we again see no effects, and these null effects are signed in the opposite direction as Republicans in the sample (and in accordance with expectations). Anger makes Republicans more ethnocentric, in line with their pre-dispositions, but does not have a similar effect among Democrats.

# A2: ACME Mediations

## Table A3. The Mediating Role of Anger on Ethnocentrism – Conservative Respondents (ACME)

|  |  |  |
| --- | --- | --- |
|  | Anger | Anger |
| Econ. Anger Treatment | 1.42\*\*\*  (.25) | .19  (.30) |
| Emotional Response |  | .46\*\*\*  (.12) |
| Constant | -.38\*\*  (.16) | .36\*\*  (.16) |
| *N* | 65 | 65 |
| *R*2 | .3319 | .2997 |
| *ACME* |  | .67\*\*\* |
| *Direct Effect* |  | .19 |
| *Total Effect* |  | .85\*\*\* |
| *% Mediated* |  | 77.87 |
|  |  |  |

Table entries are OLS coefficients with standard errors in parenthesis.

\* p<0.1, \*\* p<0.05, \*\*\* p<0.01, two-tailed

## Table A4: Effect of Treatments on Ethnocentrism, Mediated Through Emotions

**Liberal Respondents (Through Anger)**

|  |  |  |  |
| --- | --- | --- | --- |
| Effect on Ethnocentrism | Anxiety Treatment | Anger Treatment | Neutral Treatment |
| Reduced | -.05  (.19) | -.11  (.19) | .35\*  (.20) |
| Full | -.02  (.19) | -.01  (.21) | .40\*\*  (.20) |
| Difference | -.04  (.04) | -.10  (.10) | -.04  (.05) |
| *N* | 166 | 166 | 166 |

**Liberal Respondents (Through Fear)**

|  |  |  |  |
| --- | --- | --- | --- |
| Effect on Ethnocentrism | Anxiety Treatment | Anger Treatment | Neutral Treatment |
| Reduced | -.05  (.19) | -.11  (.19) | .35\*  (.20) |
| Full | .03  (.22) | -.09  (.19) | .40\*  (.21) |
| Difference | -.08  (.11) | -.02  (.03) | -.05  (.07) |
| *N* | 166 | 166 | 166 |

Table entries are OLS coefficients with standard errors in parentheses. The reduced model predicts the dependent variable with only the treatments (the control is suppressed for reference), while the full model predicts ethnocentrism with the treatments and measures of discrete emotional responses (either anger and fear) for conservatives. \*\*\* - p>.01, \*\* - p>.05, \* - p>.10.

# A3: Measurement model results.

Measurement results from the experimental study are included here.

## Table A5: Measurement model results

**PANAS-M (Emotions) n = 702**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | Factor loadings | | |  |  |
| Indictor | Est. | SE | p-value | Error Variance | R2 |
| **Anger Factor** |  |  |  |  |  |
| Angry | .771 | .021 | .000 | .406 | .594 |
| Mad | .778 | .021 | .000 | .395 | .605 |
| Furious | .671 | .025 | .000 | .550 | .450 |
| Outraged | .707 | .024 | .000 | .501 | .499 |
| **Anxiety Factor** |  |  |  |  |  |
| Anxious | .754 | .024 | .000 | .432 | .568 |
| Afraid | .619 | .029 | .000 | .617 | .383 |
| Nervous | .778 | .023 | .000 | .394 | .606 |
| **Positive Affect Factor** |  |  |  |  |  |
| Proud | .465 | .055 | .000 | .784 | .216 |
| Hopeful | .491 | .056 | .000 | .759 | .241 |
| Enthusiastic | .462 | .055 | .000 | .786 | .214 |
| **Negative Affect Factor** |  |  |  |  |  |
| Disturbed | .582 | .030 | .000 | .662 | .338 |
| Distressed | .685 | .027 | .000 | .531 | .469 |
| Upset | .685 | .027 | .000 | .531 | .469 |

Chi-Square: 168.40 (p=.000); RMSEA=.051; CFI = .956.

**Ethnocentrism (feeling thermometers), white respondents only (n=479)**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | Factor loadings | | |  |  |
| Indictor | Est. | SE | p-value | Error Variance | R2 |
| **Ethnocentrism** |  |  |  |  |  |
| African Americans | .886 | .013 | .000 | .215 | .785 |
| Latinos | .903 | .012 | .000 | .185 | .815 |
| Asians | .809 | .018 | .000 | .346 | .654 |
| Muslims | .842 | .160 | .000 | .291 | .709 |

Chi-Square: 2.49 (p=.288); RMSEA=.023; CFI = 1.00.

**Ethnocentrism (Kinder and Kam (2009)), white respondents only (n=479)**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | Factor loadings | | |  |  |
| Indictor | Est. | SE | p-value | Err. Var. | R2 |
| **Prejudice, African Americans** | |  |  |  |  |
| prej\_afam\_1 | .847 | .019 | .000 | .283 | .717 |
| prej\_afam\_2 | .824 | .021 | .000 | .320 | .680 |
| prej\_afam\_3 | .883 | .019 | .000 | .220 | .780 |
| **Prejudice, Latinos** | |  |  |  |  |
| prej\_latin\_1 | .603 | .035 | .000 | .636 | .364 |
| prej\_latin\_2 | .774 | .027 | .000 | .401 | .599 |
| prej\_latin\_3 | .808 | .026 | .000 | .345 | .653 |
| **Prejudice, Muslims** | |  |  |  |  |
| prej\_muslim\_1 | .827 | .020 | .000 | .316 | .684 |
| prej\_muslim\_2 | .836 | .021 | .000 | .301 | .699 |
| prej\_muslim\_3 | .786 | .023 | .000 | .382 | .618 |
| **Prejudice index** | |  |  |  |  |
| Prejudice, Af. Am.s | .901 | .017 | .000 | .189 | .811 |
| Prejudice, Latinos | .916 | .017 | .000 | .160 | .840 |
| Prejudice, Muslims | .912 | .016 | .000 | .168 | .832 |

Chi-Square: 60.65 (p=.288); RMSEA=.083; CFI = .987.

The results from these analyses reported here show that the models fit the data relatively well. For the emotion measures, the RMSEA and CFI statistics indicate acceptable fit. For the ethnocentrism measures, both chi-squares were statistically insignificant, which is quite unusual in samples of these size, and the CFI indices indicate excellent fit, while the RMSEA indicated excellent fit for the feeling thermometers and acceptable fit for the Kinder and Kam ethnocentrism battery. All factor loadings were significant at the .000 level, and all R2 statistics were well above .2, meaning the latent concepts explained a satisfactory proportion of the variance of all indicators used.

Some readers may notice that we include attitudes towards Asian Americans when using feeling thermometers but not when using the Kinder and Kam ethnocentrism measure. We exclude anti-Asian attitudes when using the Kinder and Kam measures because the residual variance of the anti-Asian attitude first-order latent factor was estimated to be negative. Negative residual or error variance estimates are typically a sign of extreme problems with the model, typically some variety of empirical underidentification. In this case, it appears that while general sentiments towards Asians follow similar logics to those of other minority groups, the specific stereotypes included in the Kinder and Kam question battery do not. This is likely a result of “model minority” stereotypes. Since predicted factor scores from models that are not identified are unreliable, we do not include Asians in the Kinder and Kam variable in any of our analyses, even robustness checks.

# A4. Analysis of Ethnocentrism (Kinder and Kam)

In the primary manuscript, we used an index composed of feeling thermometers toward minority groups. Measurement model fit indices implied that the feeling thermometers produced a higher quality index (i.e. one with better model fit) than the second-order CFA used to compute the Kinder and Kam index. Here we include an analysis replicating that presented in Table 2 in the main manuscript, but using the Kinder and Kam index. Results were consistent with those presented in the main manuscript, except the neutral treatment did not have a significant influence on ethnocentrism at any ideological position.

## Figure A3: Marginal effects of anger economic treatments on ethnocentrism



## Table A6: Analyses of treatment effects on emotions and ethnocentrism

|  |  |  |  |
| --- | --- | --- | --- |
|  | Anger | Fear | Ethnocentrism |
| Predictor (n=864) | Est  (SE) | Est  (SE) | Est  (SE) |
| Anger | - | - | -.133  (.082) |
| Anxiety | - | - | -.028  (.093) |
| Ideology | - | - | .198\*\*\*  (.020) |
| Interaction, Ideology\*anger | - | - | .072\*\*\*  (.019) |
| Interaction, Ideology\*anxiety | - | - | .022  (.022) |
|  |  |  |  |
| Treatment Effects |  |  |  |
| Econ. Threat, Anxiety | .346\*  (.111) | .984\*\*\*  (.108) | .058  (.113) |
| Econ. Threat, Anger | 1.18\*\*\*  (.107) | .424\*\*\*  (.104) | -.112  (.113) |
| Econ. Threat, Neutral | .287\*  (.111) | .835\*\*\*  (.108) | .139  (.111) |
| Intercept | -.424\*\*\*  (.076) | -.501\*\*\*  (.073) | -.756\*\*\*  (.106) |

\*=sig. at .05 level; \*\*=sig. at .01 level; \*\*\*=sig. at .001 level

# A5. Main Manuscript Supplemental Analyses

## Table A7. Treatment effects on each minority group

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Predictor (n=479) | African Americans | Latinos | Asians | Muslims |
|  |  |  |  |  |
| Treatment Effects |  |  |  |  |
| Econ. Threat, Anxiety | -7.038  (6.581) | -4.556  (6.319) | -3.357  (5.189) | -3.426  (8.190) |
| Econ. Threat, Anger | -11.152  (6.581) | -8.228  (6.358) | -4.427  (5.221) | -4.168  (8.241) |
| Econ. Threat, Neutral | 12.963\*  (6.886) | 12.554\*  (6.653) | 9.750\*  (5.463) | 16.658\*  (8.623) |
|  |  |  |  |  |
| Ideology | 3.734\*\*\*  (1.034) | 3.413\*\*\*  (.001) | 2.801\*\*\*  (.820) | 6.101\*\*\*  1.294 |
|  |  |  |  |  |
| Interactions |  |  |  |  |
| Econ. Threat, Anxiety X Ideology | 2.033  (1.486) | 2.033  (1.486) | .997  (1.221) | 2.427  (1.926) |
| Econ. Threat, Anger X Ideology | 2.826\*  (1.505) | 2.826\*  (1.505) | .757  (1.236) | 2.857  (1.951) |
| Econ. Threat, Neutral X Ideology | -2.089  (1.596) | -2.089  (1.596) | -1.907  (1.310) | -2.191  (2.068) |
| Intercept | -6.012 | -6.791 | -5.728 | -7.998 |

Table entries are OLS coefficients with standard errors in parentheses. Analyses restricted to white respondents only. Feeling thermometers are reversed coded, where *higher* values indicated more *negative* feelings towards the group, for ease of comparability to ethnocentrism measures. \* p<0.1, \*\* p<0.05, \*\*\* p<0.01

## Table A8. Anger, Fear and Black Americans FT (Study 2)

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | Treatments Only | | Treatments and Emotions | |
|  | Republicans | Democrats | Republicans | Democrats |
| Crisis: Threat | 16.580\*\*\* (5.359) | -2.267 (4.011) | 22.474\*\*\* (5.545) | -3.453 (4.732) |
| Crisis: Grievance | 7.040 (4.943) | -0.821 (3.876) | 11.663\*\* (5.433) | -0.146 (4.459) |
| Anger |  |  | 5.473\* (2.828) | -3.350 (2.121) |
| Fear |  |  | -22.032\*\*\* (6.597) | 4.292 (3.418) |
| Constant | 27.449\*\*\* (3.459) | 28.600\*\*\* (2.790) | 21.456\*\*\* (4.033) | 28.729\*\*\* (3.078) |
| N | 131 | 241 | 131 | 241 |
| *R*2 | 0.0696 | 0.0014 | 0.1455 | 0.0139 |

Table entries are OLS coefficients with standard errors in parentheses. Analyses restricted to white respondents only. Feeling thermometers are reversed coded, where *higher* values indicated more *negative* feelings towards the group, for ease of comparability to ethnocentrism measures. \* p<0.1, \*\* p<0.05, \*\*\* p<0.01

## Table A9. Anger, Fear and Hispanic / Latino Americans FT (Study 2)

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | Treatments Only | | Treatments and Emotions | |
|  | Republicans | Democrats | Republicans | Democrats |
| Crisis: Threat | 19.380\*\*\* (5.374) | 3.122 (3.988) | 23.050\*\*\* (5.601) | 6.949 (4.712) |
| Crisis: Grievance | 6.999 (5.014) | 1.903 (3.855) | 7.839 (5.527) | 4.919 (4.440) |
| Anger |  |  | 7.683\*\*\* (2.880) | -0.450 (2.112) |
| Fear |  |  | -17.808\*\*\* (6.712) | -4.468 (3.404) |
| Constant | 28.735\*\*\* (3.469) | 27.225\*\*\* (2.774) | 25.593\*\*\* (4.075) | 25.287\*\*\* (3.065) |
| N | 129 | 241 | 129 | 241 |
| *R*2 | 0.0939 | 0.0026 | 0.1568 | 0.0123 |

Table entries are OLS coefficients with standard errors in parentheses. Analyses restricted to white respondents only. Feeling thermometers are reversed coded, where *higher* values indicated more *negative* feelings towards the group, for ease of comparability to ethnocentrism measures. \* p<0.1, \*\* p<0.05, \*\*\* p<0.01

## Table A10. Anger, Fear and Muslims FT (Study 2)

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | Treatments Only | | Treatments and Emotions | |
|  | Republicans | Democrats | Republicans | Democrats |
| Crisis: Threat | 7.518 (6.137) | 1.086 (4.320) | 9.039 (6.540) | 2.635 (5.113) |
| Crisis: Grievance | 2.648 (5.677) | 1.212 (4.176) | 0.770 (6.347) | 1.618 (4.819) |
| Anger |  |  | 7.251\*\* (3.323) | 1.580 (2.288) |
| Fear |  |  | -11.159 (7.904) | -3.281 (3.686) |
| Constant | 52.041\*\*\* (3.928) | 35.114\*\*\* (3.015) | 51.345\*\*\* (4.720) | 34.570\*\*\* (3.335) |
| N | 128 | 240 | 128 | 240 |
| *R*2 | 0.0119 | 0.0004 | 0.0494 | 0.0044 |

Table entries are OLS coefficients with standard errors in parentheses. Analyses restricted to white respondents only. Feeling thermometers are reversed coded, where *higher* values indicated more *negative* feelings towards the group, for ease of comparability to ethnocentrism measures. \* p<0.1, \*\* p<0.05, \*\*\* p<0.01

## Table A11. Treatment effects on ethnocentrism, no moderation (Study 1)

|  |  |
| --- | --- |
|  | Ethnocentrism |
| Predictor (n=479) | Est  (SE) |
|  |  |
| Treatment Effects |  |
| Econ. Threat, Anxiety | .099  (.115) |
| Econ. Threat, Anger | .084  (.112) |
| Econ. Threat, Neutral | .214\*  (.116) |
| Ideology | .195\*\*\*  (.022) |
| Intercept | -.826 |

## Table A12. Treatment effects on ethnocentrism, no moderation (Study 2)

|  |  |
| --- | --- |
|  | Ethnocentrism |
| Crisis: Threat | .012  (.017) |
| Crisis: Grievance | .024  (.017) |
| Intercept | .017 |
| N | 357 |

## Table A13. The Mediating Role of Anger on Ethnocentrism – Conservative Respondents (ACME) (Study 1)

|  |  |  |
| --- | --- | --- |
|  | Anger | Ethnocentrism |
| Econ. Anger Treatment | 1.12\*\*  (.09) | -.12  (.10) |
| Anger |  | .16\*\*  (.05) |
| Constant | -.44\*\*  (.06) | .00  (.06) |
| *N* | 370 | 370 |
| *R*2 | .2967 | .0350 |
| *ACME* |  | .19\*\* |
| *Direct Effect* |  | -.12 |
| *Total Effect* |  | .065 |
| *% Mediated* |  | 1.76 |
|  |  |  |

Table entries are OLS coefficients with standard errors in parenthesis.

\*\* p<0.05, two-tailed

## Table A14. The Mediating Role of Anxiety on Ethnocentrism – Conservative Respondents (ACME) (Study 1)

|  |  |  |
| --- | --- | --- |
|  | Anxiety | Ethnocentrism |
| Econ. Anxiety Treatment | .89\*\*  (.08) | .11  (.10) |
| Anxiety |  | -.05  (.05) |
| Constant | -.52\*\*  (.06) | -.09  (.06) |
| *N* | 351 | 351 |
| *R*2 | .2511 | .0041 |
| *ACME* |  | -.04 |
| *Direct Effect* |  | .11 |
| *Total Effect* |  | .07 |
| *% Mediated* |  | -.38 |
|  |  |  |

Table entries are OLS coefficients with standard errors in parenthesis.

\*\* p<0.05, two-tailed

**Table A15. The Mediating Role of Anger on Ethnocentrism – Republican Respondents (ACME) (Study 2)**

|  |  |  |
| --- | --- | --- |
|  | Anger | Ethnocentrism |
| Crisis: Grievance Treatment | .84\*\*  (.17) | .09  (.26) |
| Anger |  | .13  (.14) |
| Constant | -.52\*\*  (.11) | .20  (.17) |
| *N* | 104 | 104 |
| *R*2 | .2015 | .0169 |
| *ACME* |  | .12 |
| *Direct Effect* |  | .09 |
| *Total Effect* |  | .21 |
| *% Mediated* |  | .39 |
|  |  |  |

Table entries are OLS coefficients with standard errors in parenthesis.

\*\* p<0.05, two-tailed

## Table A16. The Mediating Role of Anxiety on Ethnocentrism – Republican Respondents (ACME) (Study 2)

|  |  |  |
| --- | --- | --- |
|  | Anxiety | Ethnocentrism |
| Crisis: Threat Treatment | .44\*\*  (.08) | .82\*\*  (.25) |
| Anxiety |  | -.18  (.27) |
| Constant | -.40\*\*  (.05) | .06  (.18) |
| *N* | 94 | 94 |
| *R*2 | .2235 | .1152 |
| *ACME* |  | -.07 |
| *Direct Effect* |  | .82\*\* |
| *Total Effect* |  | .75\*\* |
| *% Mediated* |  | -.09 |
|  |  |  |

Table entries are OLS coefficients with standard errors in parenthesis.

\*\* p<0.05, two-tailed

**Table A17. The Mediating Role of Anger on Ethnocentrism – Republican Respondents (ACME) (Study 2) (Includes Control for Anxiety)**

|  |  |  |
| --- | --- | --- |
|  | Anger | Ethnocentrism |
| Crisis: Grievance Treatment | .84\*\*  (.17) | .27  (.28) |
| Anger |  | .27\*  (.16) |
| Anxiety (Control) |  | -.71\*  (.43) |
| Constant | -.52\*\*  (.11) | -.01  (.21) |
| *N* | 104 | 104 |
| *R*2 | .2015 | .0433 |
| *ACME* |  | .23\* |
| *Direct Effect* |  | .28\* |
| *Total Effect* |  | .51\* |
| *% Mediated* |  | .44 |
|  |  |  |

Table entries are OLS coefficients with standard errors in parenthesis.

\* p<0.10, \*\* p<0.05, two-tailed

## Table A18. The Mediating Role of Anxiety on Ethnocentrism – Republican Respondents (ACME) (Study 2) (Includes Control for Anger)

|  |  |  |
| --- | --- | --- |
|  | Anxiety | Ethnocentrism |
| Crisis: Threat Treatment | .44\*\*  (.08) | .79\*\*  (.24) |
| Anxiety |  | -.58\*  (.33) |
| Anger (Control) |  | .54\*\*  (.25) |
| Constant | -.40\*\*  (.05) | .18  (.18) |
| *N* | 94 | 94 |
| *R*2 | .2235 | .1577 |
| *ACME* |  | -.25 |
| *Direct Effect* |  | .81\*\* |
| *Total Effect* |  | .56\* |
| *% Mediated* |  | -.46 |
|  |  |  |

Table entries are OLS coefficients with standard errors in parenthesis.

\* p<0.10, \*\* p<0.05, two-tailed

**Table A19: Effect of Treatments on Ethnocentrism, Mediated Through Emotions Conservative Respondents (Through Anger)**

|  |  |  |  |
| --- | --- | --- | --- |
| Effect on Ethnocentrism | Anxiety Treatment | Anger Treatment | Neutral Treatment |
| Reduced | .56\*\*  (.24) | .84\*\*\*  (.24) | .04  (.27) |
| Full | .48\*\*  (.24) | .34  (.28) | .01  (.27) |
| Difference | .08  (.14) | .50\*\*  (.20) | .02  (.14) |
| *N* | 112 | 112 | 112 |

**Conservative Respondents (Through Anxiety)**

|  |  |  |  |
| --- | --- | --- | --- |
| Effect on Ethnocentrism | Anxiety Treatment | Anger Treatment | Neutral Treatment |
| Reduced | .56\*\*  (.25) | .84\*\*\*  (.25) | .04  (.28) |
| Full | .55\*\*  (.26) | .83\*\*\*  (.26) | .02  (.30) |
| Difference | .01  (.07) | .01  (.06) | .02  (.10) |
| *N* | 112 | 112 | 112 |

Table entries are OLS coefficients with standard errors in parentheses. The reduced model predicts the dependent variable with only the treatments (the control is suppressed for reference), while the full model predicts ethnocentrism with the treatments and measures of discrete emotional responses (either anger and anxiety) for conservatives. \*\*\* - p>.01, \*\* - p>.05, \* - p>.10.

### **Table A20. Anger, Anxiety and Ethnocentrism (Study 2)**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | Treatments Only | | Treatments and Emotions | |
|  | Republicans | Democrats | Republicans | Democrats |
| Crisis: Threat | 0.728\*\*\* (0.253) | -0.104 (0.167) | 0.863\*\*\* (0.267) | -0.070 (0.198) |
| Crisis: Grievance | 0.199 (0.235) | 0.012 (0.161) | 0.175 (0.258) | 0.074 (0.187) |
| Anger |  |  | 0.321\*\* (0.134) | -0.080 (0.089) |
| Anxiety |  |  | -0.601\*\* (0.268) | 0.024 (0.143) |
| Constant | 0.134 (0.165) | -0.212\* (0.116) | 0.060 (0.187) | -0.239\* (0.129) |
| N | 132 | 242 | 132 | 242 |
| *R*2 | 0.0621 | 0.0024 | 0.1119 | 0.0060 |

Table entries are OLS coefficients with standard errors in parentheses. Analyses restricted to white respondents only. \* p<0.1, \*\* p<0.05, \*\*\* p<0.01

# A7. Balance Statistics

**Study 1, main manuscript**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Demographic | Control | Econ Threat, Anxiety | Econ Threat, Anger | Econ. Threat, Neutral | Total |
| **Percentages** |  |  |  |  |  |
| **Region** |  |  |  |  |  |
| Southeast | 27.47 | 30.18 | 33.51 | 32.52 | 30.91 |
| Northeast | 24.18 | 20.71 | 25.00 | 19.63 | 22.51 |
| Midwest | 21.998 | 22.49 | 22.34 | 26.99 | 23.36 |
| West | 13.19 | 14.79 | 9.57 | 8.59 | 11.54 |
| Southwest | 13.19 | 11.83 | 9.57 | 11.04 | 11.40 |
| **Gender** |  |  |  |  |  |
| Male | 52.75 | 49.11 | 51.06 | 50.31 | 50.85 |
| Female | 46.70 | 50.30 | 47.87 | 48.47 | 48.29 |
| Nonbinary | .55 | .59 | 1.06 | 1.23 | .85 |
| **Race / Ethnicity** |  |  |  |  |  |
| White | 80.77 | 75.15 | 72.87 | 77.30 | 76.50 |
| Black | 8.79 | 11.83 | 11.70 | 9.82 | 10.54 |
| Other | 10.44 | 13.02 | 15.43 | 12.88 | 12.96 |
| **Means** |  |  |  |  |  |
| Party ID (Republican) | 3.64 | 3.49 | 3.45 | 3.58 | 3.54 |
| Education (7-point) | 4.36 | 4.35 | 4.26 | 4.34 | 4.33 |
| Income (12-point) | 6.51 | 6.65 | 6.11 | 6.64 | 6.46 |
| Age | 38.21 | 38.41 | 39.96 | 39.77 | 39.09 |

None of the differences were significant, indicating that randomization worked properly.

**Study 2, main manuscript**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Demographic | Control | Econ Threat, Fear | Econ Threat, Anger | Total |
| **Percentages** |  |  |  |  |
| **Region** |  |  |  |  |
| Southeast | 27.86 | 22.89 | 24.61 | 25.13 |
| Northeast | 23.38 | 22.89 | 23.04 | 23.10 |
| Midwest | 25.37 | 27.36 | 24.08 | 25.63 |
| West | 11.94 | 16.92 | 20.42 | 16.36 |
| Southwest | 11.44 | 8.96 | 7.85 | 9.44 |
| **Gender** |  |  |  |  |
| Male | 49.75 | 52.97 | 55.50 | 52.69 |
| Female | 50.25 | 46.53 | 44.50 | 47.14 |
| Nonbinary | 0.00 | 0.50 | 0.00 | 0.17 |
| **Race / Ethnicity** |  |  |  |  |
| White | 80.60 | 76.73 | 79.69 | 78.99 |
| Black | 8.96 | 12.87 | 11.46 | 11.09 |
| Other | 10.45 | 10.40 | 8.85 | 9.92 |
| Hispanic / Latino | 24.75 | 14.50 | 19.27 | 19.53 |
| **Means** |  |  |  |  |
| Party ID (Republican) | 3.26 | 3.19 | 3.18 | 3.21 |
| Education (7-point) | 3.89 | 3.80 | 3.70 | 3.80 |
| Income (12-point) | 6.59 | 6.60 | 6.35 | 6.51 |
| Age | 47.10 | 45.44 | 47.35 | 46.62 |
|  |  |  |  |  |

**Study A2, Appendix**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Demographic | Control | Econ Threat, Fear | Econ Threat, Anger | Total |
| **Percentages** |  |  |  |  |
| **Region** |  |  |  |  |
| Southeast | 33.33 | 30.21 | 24.48 | 29.32 |
| Northeast | 23.81 | 25.00 | 26.04 | 24.96 |
| Midwest | 21.69 | 22.92 | 26.04 | 23.56 |
| West | 10.58 | 10.94 | 13.02 | 11.52 |
| Southwest | 10.58 | 10.42 | 10.42 | 10.47 |
| **Gender** |  |  |  |  |
| Male | 60.00 | 57.95 | 58.85 | 58.93 |
| Female | 39.47 | 42.05 | 40.63 | 40.73 |
| Nonbinary | 0.00 | 0.00 | 0.52 | 0.35 |
| **Race / Ethnicity** |  |  |  |  |
| White | 77.25 | 76.92 | 72.25 | 75.48 |
| Black | 10.58 | 13.33 | 14.66 | 12.87 |
| Other | 12.17 | 9.74 | 13.09 | 11.65 |
| Hispanic / Latino | 15.26 | 17.44 | 18.75 | 17.16 |
| **Means** |  |  |  |  |
| Party ID (Republican) | 3.62 | 3.50 | 3.60 | 3.57 |
| Education (7-point) | 4.22 | 4.36 | 4.35 | 4.31 |
| Income (12-point) | 6.15 | 5.75 | 6.13 | 6.00 |
| Age | 37.96 | 37.10 | 38.64 | 37.90 |

**A6. Question Wordings**

Question wordings are below.

**Treatment texts (Study 1):**

**CONTROL**: “Think about a time in your life when brushed your teeth. Try to think of all of the details of what was happening at the time, to the point that you could imagine this is happening to you now. Think about when this happened, who was involved, and what your feelings were.

For the next 90 seconds, please write in detail about this event. Write with enough detail that someone reading this description could imagine brushing their teeth themselves.”

**ECONOMIC THREAT, NEUTRAL**: “Think about a time in your life when you believed the economic situation of the country was not going well. Try to think of all of the details of what was happening at the time, to the point that you could imagine this is happening to you now. Think about when this happened, who was involved, and what your feelings were.

For the next 90 seconds, please write in detail about this event. Write with enough detail that someone reading this description could feel economic anxiety themselves.”

**ECONOMIC THREAT, ANGER**: “Think about a time in your life when you felt angry about the economic situation of the country. Try to think of all of the details of what was happening at the time, to the point that you could imagine this is happening to you now. Think about when this happened, who was involved, and what your feelings were.

For the next 90 seconds, please write in detail about this event. Write with enough detail that someone reading this description could feel economic anxiety themselves.”

**ECONOMIC THREAT, ANXIETY**: “Think about a time in your life when you felt worried about the economic situation of the country. Try to think of all of the details of what was happening at the time, to the point that you could imagine this is happening to you now. Think about when this happened, who was involved, and what your feelings were.

For the next 90 seconds, please write in detail about this event. Write with enough detail that someone reading this description could feel economic anxiety themselves.”

**Video Scripts (Study 2)**

**Control Video:** [**https://www.youtube.com/watch?v=pXe\_Wt-Qu4E**](https://www.youtube.com/watch?v=pXe_Wt-Qu4E)

This video features a man calmly providing step by step instructions on how to make a sandwich wrap.

**[Note: Each treatment video was adapted from the video at the following link:** [**https://www.youtube.com/watch?v=bv48A9BSews&t=154s**](https://www.youtube.com/watch?v=bv48A9BSews&t=154s)**. We used the first segment (from 0:32 to about 2:10) edited with text placards which are included below.]**

**Grievance: Video text**

Diane and Ted are a college educated, middle-class couple with three children. They lived comfortably for most of their lives; then the economic crisis hit. Ted lost his job due to economic downturn, and Diane was forced to step down to part time work. As a result, the family fell below the poverty line. They were forced to make major sacrifices: Diane often took leftover cereal from her job to feed her family, and the family once had to subsist on nothing but canned soup for two weeks. When they fell behind on the mortgage payment, foreclosure and homelessness became constant threats.

The economic crisis that caused this hardship is unlikely to happen again, as it was caused by unique problems that have since been resolved, and the economy has mostly recovered. However, most of the individuals in the banking and finance sectors who caused the crisis were never punished or suffered for their actions. None were arrested or convicted, and most did not suffer any significant financial hardship and remain extraordinarily wealthy and powerful. The politicians who allowed the crisis to happen, for the most part, remain in office. Meanwhile, hard-working people continue to suffer from the aftereffects of the crisis.

**Threat: Video text**

Diane and Ted are college educated middle-class couple with three children. They live comfortably for most of their lives; then the economic crisis hits. Ted loses his job due to economic downturn, and Diane is forced to step down to part time work. As a result, the family falls below the poverty line. They are forced to make major sacrifices: Diane often takes leftover cereal from her job to feed her family, and the family must subsist on nothing but canned soup for two weeks. They fall behind on the mortgage payment, and foreclosure and homelessness become constant threats.

The economic crisis that devastates Diane and Ted was unavoidable; no one understood the causes until it was too late, and thus no one could have prevented it. Experts say that another economic crisis is certain to happen in the near future, and it will be even worse than the one Diane and Ted faced. The nature of the modern economy makes such a crisis inevitable. Since we are still suffering the aftereffects of the earlier crisis, governments and economic firms will have little ability to lessen the suffering and pain next time.

**Emotions Measures:** Emotions measured using the PANAS-M format (Rhodes-Purdy, Navarre and Utych 2020).

**PANAS-M Prong One:**

“Now we want to ask some questions about how the writing exercise you just completed made you feel. Please select any of the following emotions that you felt after completing the writing exercise”

[Note: Emotions were presented in random order to respondents]

Anxious

Hostile

Upset

Afraid

Disturbed

Distressed

Mad

Furious

Outraged

Nervous

Worried

Hopeful

Proud

Enthusiastic

I felt none of these

**PANAS-M Prong Two:**

For each selected emotion, participants were asked the following (displayed in random order)

“Now please tell us how strongly or weakly you feel the emotions you selected in the previous question.

**[Emotion Response Name]**”

Very slightly or not at all

A little

Moderately

Quite a bit

Extremely

**Ethnocentrism Questions**

These ethnocentrism questions are those used on the American National Election Study, as validated by Kinder and Kam (2009).

**Feeling Thermometers**

“We'd like to get your feelings toward some of groups in our society. The survey will display the name of a person and I'd like you to rate that person using something we call the feeling thermometer.

Ratings between 50 degrees and 100 degrees mean that you feel favorable and warm toward the group. Ratings between 0 degrees and 50 degrees mean that you don't feel favorable toward the group and that you don't care too much for that group. You would rate the group at the 50-degree mark if you don't feel particularly warm or cold toward the group.”

Whites

Blacks

Latinos

Asian-Americans

Muslims

[0 – Cold, 50 – Neutral, 100 – Warm]

**Stereotype Measures**

“Now I have some questions about different groups in our society.

I’m going to show you a seven-point scale on which the characteristics of people in a group can be rated. In the first statement a score of 1 means that you think almost all of the people in that group are “hardworking/intelligent/trustworthy.” A score of 7 means that you think almost all of the people in the group are “lazy/unintelligent/untrustworthy” A score of 4 means that you think the group is not towards one end or the other, and of course you may choose any number in between that comes closest to where you think people in the group stand. “

On all questions, participants rated Whites, Blacks, Latinos, Asian-Americans, and Muslims. Groups were presented in random order.

Where would you rate the following groups on this scale

1 – Hardworking

2 –

3 –

4 – Neutral

5 –

6 –

7 - Lazy

Where would you rate the following groups on this scale

1 – Intelligent

2 –

3 –

4 – Neutral

5 –

6 –

7 - Unintelligent

Where would you rate the following groups on this scale

1 – Trustworthy

2 –

3 –

4 – Neutral

5 –

6 –

7 - Untrustworthy

1. Participants were required to be located in the United States, have a total approval rating of 97% or better, and have completed at least 100 tasks on MTurk. Further, participants who clicked through the 2-minute video treatments in less than 1 minute, 40 seconds, were screened out of the study – that is, the study immediately terminated, and they were therefore asked no dependent variable questions (and are not included in the number of valid study completions). [↑](#endnote-ref-1)