**Appendix**

Methods details and results are presented for studies in alphabetical order by author:

**Farhart, Miller and Saunders**

**Hypotheses**

*H1: Does Self-Affirmation Mitigate the Effect of Motivated Conspiracy Endorsement?*

Self-affirmation will mitigate the impact of motivated conspiracy endorsement. In other words, respondents who are given the opportunity to self-affirm will be less likely to feel the need to engage in ideologically motivated conspiracy endorsement to bolster their worldviews than those who are not given the opportunity to self-affirm.

**Design**

2 cell. Respondents were randomly assigned to one of two conditions. The first condition provided respondents the opportunity to self-affirm and the second did not.

**Sample**

We recruited 4,349 US adults from MTurk, through TurkPrime. Our analyses focus on the 3,337 self-identified conservatives and liberals. We also replicate our findings with party identification instead of ideology; for those analyses, we focus on the 3,799 self-identified Republicans and Democrats (treating leaners as partisans). The data were collected between May 20, 2016 and July 20, 2016.

**Procedure**

*Self-affirmation manipulation*. Respondents were randomly assigned to one of two conditions, in which they were (n=2,107) or were not (n=2,238) given the opportunity to self-affirm.

After the self-affirmation manipulation, respondents answered two “filler” questions about their interest in politics, and then proceeded to the conspiracy theory battery, followed by ideology, demographic, and personality questions.

We used a self-affirmation manipulation adapted from Cohen, Aronson, and Steele (2000; see also Nyhan & Reifler 2019). Respondents assigned to the self-affirmation condition saw the following prompt:

“In this portion of the study, we would like to ask you some questions about your ideas, your beliefs, and your life. When you respond to these questions, please bear in mind that there are no right or wrong answers. Below is a list of characteristics and values, some of which may be important to you, some of which may be unimportant. Looking at this list, please check the box next to the characteristic or value that is MOST important to you.”

The list included the following characteristics and values: artistic skills/aesthetic appreciation, sense of humor, relations with friends/family, spontaneity/living life in the moment, social skills, athletics, musical ability/appreciation, physical attractiveness, creativity, business/managerial skills, and romantic values. On the next screen, the self-affirmation respondents saw the following prompt:

“In a brief paragraph, please describe a personal experience in which X characteristic or value [filled with the one that they chose as the MOST important] was especially important to you and made you feel good about yourself. Focus on your thoughts and feelings, and don't worry about spelling, grammar, or how well written it is.”

After 30 seconds, the “next” button appeared at the bottom of the screen, at which time respondents could move on to the next questions (two political interest questions, followed by the conspiracy theory battery). The purpose of the 30-second delay was to ensure that respondents did not simply click past the text box and proceed to the rest of the survey.

Respondents assigned to the control condition saw the following prompt, “Please list everything you have had to eat or drink in the last 48 hours. Do not worry about those things you find yourself unable to remember.” After 30 seconds, the “next” button appeared at the bottom of the screen, at which time control respondents could move on to same questions as the self-affirmation respondents (two political interest items, followed by the conspiracy theory battery). We created a dummy variable to represent whether respondents were assigned to the self-affirmation (1) or control (0) condition.

**Measures**

***Moderator variables*.**

For political ideology, we recoded the standard seven-point ideology measure into a Conservative dummy variable. Respondents who said they were “extremely conservative,” “conservative,” or “slightly conservative” were coded as a 1 (n=1,148) and those who said they were “extremely liberal,” “liberal,” or “slightly liberal” were coded as a 0 (n=2,189). We replicated our analyses with party identification by recoding the standard seven-point branched party identification question into a Republican dummy variable. Respondents who said identified as strong, not very strong, or leaning Republicans were coded as a 1 (n=1,250), and those who identified as strong, not very strong, or leaning Democrats were coded as a 0 (n=2,549).

***Dependent variables*.**

What most conspiracy theory definitions have in common is the notion that conspiracies comprise the belief that actors, usually more powerful than the average citizen, are engaging in wide-ranging, “black-boxed” activities to which individuals can attribute an insidious explanation to a confusing event. To assess conspiracy endorsement, we selected 13 questions that met the following criteria: 1) they fit the definition of a conspiracy theory, 2) they are relatively familiar to our respondents, and 3) they are political and ideological in nature.

We began with seven of the eight conspiracy theories we assessed in our previous work (for replication purposes see Miller et al. 2016a). Four are items that we found conservatives were more likely to endorse: Obama was not born in the U.S., the 2010 Affordable Care Act included death panels, global warming is a hoax, and Saddam Hussein was involved in the 9/11 attacks. The other three are items that we found liberals were more likely to endorse: the government intentionally breached flood levees during Hurricane Katrina to protect middle-class homes, the Bush administration knew about 9/11 before it happened, and Republicans stole the 2004 election via voter fraud in Ohio.

To the four “conservative” items (i.e., ones that impugned leaders and institutions on the left, and that conservatives were therefore more likely to endorse), we added an additional three: the Jade Helm 15 military exercise was a scheme cooked up by President Obama to confiscate firearms from law-abiding citizens, former Secretary of State Hillary Clinton and others in the administration are involved in a cover-up surrounding the Benghazi terrorist attack, and the Democratically controlled Congress supported policies aimed at causing the 2008 financial crisis to push for greater federal government control over US banks and corporations.

To the three “liberal” items (i.e., ones that impugned leaders and institutions on the right, and that liberals were therefore more likely to endorse), we added an additional three: the largest banks in the US manipulate the economy for their financial gain, the Koch brothers are behind a hidden plot to destabilize the American government, and the Bush administration faked employment statistics in 2007 to obscure the seriousness of the financial crisis to protect the US banking industry and Republicans running for re-election in 2008.

Responses to each of the thirteen conspiracy questions were coded on four-point scales ranging from 0-1, with higher numbers representing greater endorsement. The seven items that we suspected would be more attractive to conservatives and Republicans were averaged to create a *conservative index* (Cronbach’s alpha = .75). The six items that we suspected would be more attractive to liberals and Democrats were averaged to create a *liberal index* (Cronbach’s alpha = .75).

**Results**

|  |  |  |  |
| --- | --- | --- | --- |
| **Farhart et al. - Conspiracy beliefs** |  |  |  |
|   | Liberal conspiracy theory beliefs |
|   | B | Robust SE | p | 95% CI |
| Republican | -0.11 | 0.01 | 0.000 | -0.13 | -0.09 |
| Self-Affirmation | 0.00 | 0.01 | 0.729 | -0.02 | 0.01 |
| Affirmation x Republican | 0.02 | 0.01 | 0.083 | 0.00 | 0.05 |
| Constant | 0.48 | 0.01 | 0.000 | 0.47 | 0.49 |
| N |  |  |  |  | 3796 |
| R2 |   |   |   |   | 0.06 |
|  |  |  |  |  |  |
|   | Conservative conspiracy theory beliefs |
| Republican | 0.22 | 0.01 | 0.000 | 0.20 | 0.24 |
| Self-Affirmation | 0.01 | 0.01 | 0.087 | 0.00 | 0.03 |
| Affirmation x Republican | 0.01 | 0.01 | 0.404 | -0.01 | 0.03 |
| Constant | 0.29 | 0.00 | 0.000 | 0.28 | 0.29 |
| N |  |  |  |  | 3797 |
| R2 |   |   |   |   | 0.27 |
|  |  |  |  |  |  |

**Kotcher**

**Hypotheses:**

*H1: Self-affirmation will lead to more favorable changes among political conservatives, and to a lesser degree in moderates, in terms of key beliefs about, perceived importance of, and policy support to address climate change, whereas its effect on liberals will be indistinct.*

**Design**

I conducted a randomized, controlled survey experiment with a 2 cell (traditional self-affirmation essay vs. control task) design.

**Sample**

Participants were recruited by an external vendor (Toluna) that maintains an online panel of participants who have agreed to participate in online surveys. Participants were quota-matched to recruit a demographically diverse sample that approximately reflects national proportions of age, gender, education, and Hispanic ethnicity found in the U.S. Census. Specifically, the sample was 48.2% male and 51.8% female; 83% non- Hispanic or non-Latino and 17% Hispanic or Latino; the median age was between 45-54; and the median level of education was “some college”.

A total sample of n=696 individuals completed the survey cells in question.

**Procedure**

Traditional Self-Affirmation. This study utilized a value essay self-affirmation manipulation widely used in previous research (for a review, see McQueen & Klein, 2006). Participants were asked to rank a list of 11 values developed by Harber (1995; e.g., Artistic skills/aesthetic appreciation, Sense of humor, Relations with friends/family) in terms of their personal importance. Next, participants were asked to think about the value they ranked as the most important to them, and then to take a few minutes to write about three or four personal experiences in which this value was important to them and made them feel good about themselves. This procedure, along with this list of values, has been used in a number of prior studies (e.g., Binning, Brick, Cohen, & Sherman, 2015; Cohen, Aronson, & Steele, 2000; Zhao, Peterson, Kim, & Rolfe-Redding, 2014).

No affirmation control task. Individuals in these conditions were asked write down everything they ate or drank in the last 48 hours. Furthermore, individuals were instructed to “not worry about those things you find yourself unable to remember.” This task has been used as a control in a number of previous studies because it is believed that almost any self-reflective writing task can potentially be self-affirming (e.g., Cohen et al., 2000; van Prooijen & Sparks, 2013).

**Measures**

***Dependent Variables***

Belief certainty that climate change is happening. Two items were used to compute a nine-point scale measuring certainty that climate change is happening. The first item asked respondents whether they think climate change is happening with response options being yes, no, or don’t know. Individuals who answered yes or no were then asked a follow up question which asked how sure they were that climate change is/is not happening (1=not at all sure, 4=extremely sure). The new variable combined responses to these two items such that 1=extremely sure climate change is not happening, 3 = somewhat sure climate change is not happening, 5=Don’t know, 7 = somewhat sure climate change is happening, 9=extremely sure climate change is happening (M=7.03, SD=2.08).

Belief in human causation. A single, six-point item was used to measure the extent to which individuals think climate change is caused by human activities versus natural changes in the environment (1=None of the above because climate change isn’t happening, 2=Caused entirely by natural changes in the environment, 3=Caused mostly by natural changes in the environment 4=Caused about equally by human activities and natural changes in the environment, 5=Caused mostly by human activities 6=Caused entirely by human activities; M=4.23, SD=1.16).

Worry about climate change. A single, 7-point item asked individuals, “How worried are you about climate change?” (1-Not at all worried, 7-Extremely worried; M=2.90, SD=1.24).

Climate change issue importance. A single, 7-point item asked individuals, “How important is the issue of climate change to you personally?” (1-Not at all important, 7- Extremely important; M=3.03, SD=1.25).

Perceived harm of climate change. Participants were asked to rate on a 7-point scale (1-Not at all, 7-A great deal), “How much do you think climate change will harm...” with four different targets: 1) you and your family, 2) people in the United States, 3) people in other countries, 4) future generations. Responses to these four items were averaged and combined into a single scale (M=4.94, SD=1.62, Cronbach’s α=0.938).

Injunctive beliefs about climate change. Participants were asked on a 7-point scale whether they think the following entities should be doing “more or less to address climate change...” (1-should be doing much less, 4-currently doing about the right amount, 7- should be doing much more). The actors are: 1) your local government officials, 2) your state government, 3) The U.S. Congress, 4) The President. Responses to these four items were averaged and combined into a single scale (M=5.31, SD=1.73, Cronbach’s α=0.967).

Climate change policy support. This variable was an averaged composite of responses to five different policies designed to address climate change. The question asked participants, “How much do you support or oppose the following policies?” (1-Strongly oppose, 4-Neither support nor oppose, 7-Strongly support; M=4.82, SD=1.12, Cronbach’s α=0.734).

Political participation intentions. This variable was an averaged index of responses to the question, “Over the next 12 months, how likely are you to do each of the following?” (1-Very unlikely, 4-Neutral, 7-Very likely). The behaviors are: 1) Write letters, email, or phone government officials about climate change, 2) Attend a community meeting or rally about climate change, 3) Sign a petition about climate change, either online or in person, 4) Donate money to an organization working to reduce climate change, 5) Vote for a political candidate because they support action to reduce climate change (M=3.70, SD=1.84, Cronbach’s α=0.921).

These items were averaged into a single composite climate attitudes outcome (alpha = .91)

***Moderator***

Political ideology. A single, 5-point scale asked individuals, “In general, do you think of yourself as...” (1-Very liberal, 3-Moderate, middle of the road, 5-Very conservative; M=2.94, SD=1.14).

Results

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Kotcher- Climate change attitudes** |  |  |  |  |
|   | Climate change attitudes  |
|   | B | Robust SE | p | 95% CI |
| Self-Affirmation | 0.02 | 0.04 | 0.598 | -0.05 | 0.09 |
| Ideology (conservatism) | -0.11 | 0.01 | 0.000 | -0.13 | -0.08 |
| Affirmation x ideology (conservatism) | -0.03 | 0.02 | 0.180 | -0.07 | 0.01 |
| Constant | 0.87 | 0.02 | 0.000 | 0.82 | 0.92 |
| N |  |  |  |  | 693 |
| R2 |   |   |   |   | 0.19 |
|  |  |  |  |  |  |

**Levendusky**

**Hypotheses:**

*Hypothesis 1: Self-affirmation techniques will reduce affective polarization.*

*Hypothesis 2: Self-affirmation will be less effective at reducing affective polarization for those with stronger identities.*

**Design:**

2 cell: Subjects were randomly assigned a self-affirmation treatment condition, or an apolitical control.

**Sample**

The experiment was conducted by GfK Custom Research (previously Knowledge Networks), which uses random digit dialing and address-based sampling to recruit representative samples of the US population for studies such as this one. A total of 2,095 respondents completed the survey on April 15–25, 2016, for a completion rate of 55 percent and an AAPOR Response Rate 3 of 4.8 percent. After dropping other treatment arms, a total of n = 1345 respondents remained.

**Procedure**

For the self-affirmation treatment, this study follows McQueen and Klein (2006) and asks subjects to pick a characteristic or value that is important to them from a long list of options (i.e., creativity, athletic talent, etc.). They were then asked to describe a time in their life when that value was important to them and made them feel good about themselves. They were told to focus on thoughts and feelings as they wrote the response. Those in the control condition wrote about where they would like to go on vacation.

Full questionnaire is available at: <https://oup.silverchair-cdn.com/oup/backfile/Content_public/Journal/poq/82/3/10.1093_poq_nfy036/1/nfy036_suppl_supplementary_materials.pdf?Expires=1607965967&Signature=ME~XZQ5GQRfeTcJCv-ca~WNgssw8F5SxztImOllbl8oesPgOqdqmMTCsCVeBSEkju9tNP3gW9xxfx2YPxVsaCH1JXFyDQiWAweJ~dR7b8PucMMjksaAJNhiKGGvzOLkwpjffHh4V3qFi7dqNhTTj3RWoCv-HbfiQ2UKICAf9eihuovv0kKsGXo4WbepFKc1ALnbEEZPrR-gEI6SIgiG4U6A5iwQkP0-lLPz02uXgHumYPLCxziYqoz~L~wN~GSAI7XgL6sT3K6qpjnrriB861RUC6GzBMfiZvn2IHLmXiUHnAOWJKDsvnvjn-tqHdW~lc5VZRyCL1p2lErC1Mb6wng__&Key-Pair-Id=APKAIE5G5CRDK6RD3PGA>

**Measures**

***Dependent variables.***

Affective polarization was measured in three ways:

1. 100-pt. Feeling thermometer ratings of the political parties (Abramowitz and Webster Forthcoming, Hetherington and Rudolph 2015) (difference score M = .36.30, SD = 34.33)

2. Social distance measures (i.e., friends with out-party, see Iyengar et al. 2012, Levendusky and Malhotra 2015) (4-pt., M = 1.78, SD = .79).

3. Whether the other party’s ideas are so extreme they are dangerous for the health of the nation (Pew Research Center 2014) (5-pt., M = 3.94, SD = .98).

This study also included a “downstream” measure:

4. Whether respondent would like to discuss political topics in a partisan homogeneous or heterogeneous group (Klar 2014) (ranges from -3 to 3, M = .74, SD = 1.11).

**Moderators**

Partisanship strength (4-pt.) branching measure.

Results

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  |  |  |  |  |  |
| **Levendusky- Affective polarization** |  |  |  |  |
|   | Affective polarization (FT) |
|   | B | Robust SE | p | 95% CI |
| Self-Affirmation | 0.02 | 0.02 | 0.458 | -0.03 | 0.06 |
| Strength of partisanship | 0.10 | 0.01 | 0.000 | 0.09 | 0.11 |
| Affirmation X strength | -0.01 | 0.01 | 0.386 | -0.03 | 0.01 |
| Constant | 0.49 | 0.01 | 0.000 | 0.47 | 0.52 |
| N |  |  |  |  | 1334 |
| R2 |   |   |   |   | 0.23 |
|  |  |  |  |  |  |
|   | Discussion polarization |
| Self-Affirmation | 0.04 | 0.02 | 0.132 | -0.01 | 0.08 |
| Strength of partisanship | 0.08 | 0.01 | 0.000 | 0.06 | 0.10 |
| Affirmation X strength | -0.02 | 0.01 | 0.050 | -0.05 | 0.00 |
| Constant | 0.48 | 0.02 | 0.000 | 0.45 | 0.51 |
| N |  |  |  |  | 1338 |
| R2 |   |   |   |   | 0.09 |
|  |  |  |  |  |  |
|   | Outparty danger |
| Self-Affirmation | 0.05 | 0.03 | 0.136 | -0.02 | 0.11 |
| Strength of partisanship | 0.08 | 0.01 | 0.000 | 0.06 | 0.10 |
| Affirmation X strength | -0.03 | 0.02 | 0.100 | -0.06 | 0.00 |
| Constant | 0.59 | 0.02 | 0.000 | 0.54 | 0.63 |
| N |  |  |  |  | 1345 |
| R2 |   |   |   |   | 0.05 |
|  |  |  |  |  |  |
|   | Social distance |
| Self-Affirmation | -0.05 | 0.03 | 0.121 | -0.12 | 0.01 |
| Strength of partisanship | 0.02 | 0.01 | 0.133 | -0.01 | 0.04 |
| Affirmation X strength | 0.02 | 0.02 | 0.237 | -0.01 | 0.05 |
| Constant | 0.23 | 0.02 | 0.000 | 0.18 | 0.27 |
| N |  |  |  |  | 1333 |
| R2 |   |   |   |   | 0.01 |
|  |  |  |  |  |  |

**Lyons**

**Hypotheses:**

*H1. Self-affirmation will reduce group-aligned belief*

*H2. Self-affirmation effects will be stronger among strong partisans.*

**Study 1**

**Design**

2 cell: Self-affirmation vs. control.

**Sample**

Data were collected using Amazon Mechanical Turk’s (mTurk) panel of online workers. All participants were compensated monetarily. 257 participants were recruited for Study 1 in October 2015 (After dropping irrelevant treatment arms n = 130)

**Procedure**

Participants in the self-affirmation condition were provided with a list of personal values. After selecting the most personally important value, they were instructed to write about why the value is important to them. The list (Personal Values Questionnaire II, Cullen, 2014) is similar to most common affirmation instruments (e.g., Nyhan & Reifler, 2019) but gives greater focus to internal values.

Individuals in the control were asked write down everything they ate or drank in the last 48 hours.

Following the writing prompt, participants completed a battery of manipulation checks. Next, they were informed that they would be asked about “a recent event in the news. An investigation by the United States Environmental Protection Agency at an Alaskan mine went badly awry earlier this year, triggering a spill of zinc, iron, copper, and other heavy metals into the water supply.” Next, participants read a news story on the spill that reported two statements from each group (Republicans vs. Democrats and the EPA) that blamed the other for the spill. Participants then reported their belief in each of four claims.

**Measures**

***Dependent variable***

*Group-aligned belief* was computed based on the following factual beliefs: “The EPA probably allowed the toxic spill to occur on purpose,” (M = 3.02, SD = 1.69); “The EPA probably is not being held to the same standard they would apply to a private business,” (M = 4.57, SD = 1.58); “Republican lawmakers were probably willing to risk the spill in order to discredit the EPA,” (M = 4.10, SD = 1.73); and “Republicans are probably using the spill to undercut the Obama administration’s rollout of emissions regulations,” (M = 4.47, SD = 1.69). Beliefs that blamed Republicans were reverse coded so that all beliefs ranged from Democrat-aligned (1) to Republican-aligned (7). These were combined, recoded with a midpoint at 0, and crossed with respondent party to create a final group-aligned belief measure that excluded Independents (M = .56, SD = .87, n = 191). This measure was converted to a standardized z-score.

***Moderator***

To test for interventions’ effects across levels of group identification, strength of party affiliation (2-pt.) was also measured.

**Study 2**

**Sample**

598 participants were recruited via Amazon Mechanical Turk in March 2016 (after dropping irrelevant treatment arms n = 274)

**Procedure**

The Study 2 procedure replicated Study 1, except with the context altered to a partisan dispute over a fictional advanced biofuels mandate. The news story was presented as a two-minute news video, with the transcript embedded below. The video included claims regarding the benefits of an advanced biofuels mandate, attributed to Democrats, and claims regarding risks, attributed to Republicans. Participants then answered questions about perceived risks and benefits.

**Measures**

***Dependent variable***

Risk and benefit beliefs were measured on 7-pt. scales (1 = *strongly disagree*, 7 = *strongly agree*). These items were drawn from prior studies (see Fung et al., 2014), and covered economic, environmental, and social aspects of biofuels technology. Risk perception was measured with six items, Chronbach’s ⍺ = .85, M = 3.77, SD = 1.21. Benefit perception was also measured with six items, Chronbach’s ⍺ = .90, M = 5.21, SD = 1.13. *Group-aligned beliefs* were calculated by subtracting risk from benefits and crossing with respondent party, excluding true independents (M = .69 SD = 1.07, n = 507). This measure was converted to a standardized z-score.

***Moderator***

Participants also reported party affiliation strength (2-pt.) to be used as the moderator.

Results

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  |  |  |  |  |  |
| **Lyons- Factual beliefs** |  |  |  |  |  |
|   | Study 1: Party-aligned blame |
|   | B | Robust SE | p | 95% CI |   |
| Self-Affirmation | -0.05 | 0.04 | 0.139 | -0.12 | 0.02 |
| Strength of partisanship | 0.16 | 0.07 | 0.034 | 0.01 | 0.30 |
| Affirmation X strength | -0.04 | 0.09 | 0.650 | -0.22 | 0.14 |
| Constant | 0.40 | 0.02 | 0.000 | 0.36 | 0.45 |
| N |  |  |  |  | 130 |
| R2 |   |   |   |   | 0.12 |
|  |  |  |  |  |  |
|   | Study 2: Party-aligned risk perception |
| Self-Affirmation | 0.00 | 0.03 | 0.943 | -0.06 | 0.05 |
| Strength of partisanship | 0.10 | 0.03 | 0.000 | 0.04 | 0.15 |
| Affirmation X strength | 0.00 | 0.04 | 0.927 | -0.08 | 0.08 |
| Constant | 0.54 | 0.02 | 0.000 | 0.50 | 0.59 |
| N |  |  |  |  | 274 |
| R2 |   |   |   |   | 0.08 |
|  |  |  |  |  |  |

**Nyhan and Reifler**

**Hypothesis:**

*H1. Self-affirmation reduces partisan misperceptions*

**Study 1**

**Design**

2 (affirmation) X 2 (graph) between-subjects survey experiment. One manipulation randomly assigned respondents to an affirmation condition in which they were asked to recall an experience in which they felt good about themselves (Affirmation) or a control condition. Another randomly exposed respondents to graphical information about the troop surge in Iraq.

**Sample**

Study 1 was part of a pre-election module on the 2008 Cooperative Congressional Election Survey (CCES) that was administered by YouGov/Polimetrix in October 2008. The dataset consists of an Internet sample of 1000 people constructed from more than 50,000 opt-in respondents to approximate a random probability sample (Rivers, n.d.). After removing irrelevant cells of the study, n = 525.

Overall, the sample is representative of the American population and matches known benchmarks well. Respondents are 48% male and 52% female. 73% are white, 12% are black, and 8% are Hispanic. 32% are age 18-34, 37% are 35-54, and 32% are 55 or older. Finally, 43% have a high school degree or less, 32% have some college or a two-year degree, and 25% have a four-year college degree or more.

In terms of party identification, our respondents are 37% Democrats, 27% independents (including leaners and identifiers of other parties), 27% Republicans, and 8% not sure, which almost perfectly matches the partisan distribution from telephone polls conducted in October 2008.

CCES respondents may be somewhat more sophisticated or politically active than those in a probability sample, but such discrepancies should not threaten the internal validity of our experimental results.

**Procedure**

Our affirmation manipulation (adapted from Cohen, Aronson, and Steele 2000) asked respondents in the treatment group to select the value that is most important to them from a list and then to write about a time in which it was “especially important to you and made you feel good about yourself.”In the control condition, respondents instead reported what they had to eat or drink in the previous 48 hours.

**Information treatment**

Those in the graph condition saw the following:

Below is a graph showing the number of insurgent attacks against US and coalition forces in Iraq per week since January 2004. Please take a moment to study it before proceeding.



**Measures**

***Dependent variable***

Our outcome of interest is factual beliefs about changes in attacks after the surge. After the manipulations, respondents were asked how the number of attacks changed on a five-point scale from “decreased substantially” to “increased substantially” . The exact wording is as follows:

From what you know about the US involvement in Iraq, what has happened to the number of insurgent attacks in Iraq since the recent increase in troop levels (“the surge”) began?

* Attacks have decreased substantially [1]
* Attacks have decreased slightly [2]
* Attacks have stayed the same [3]
* Attacks have increased slightly [4]
* Attacks have increased substantially [5]

 As in each of our studies, responses were coded so that lower values indicate more accurate beliefs (attacks decreased) and higher values indicate greater misperceptions (attacks increased).

**Study 2**

**Design**

Our 2 x 2 design closely mirrors Study 1. Respondents are randomly assigned to a self-affirmation condition (Affirmation) or to a control condition. The self-affirmation and corresponding control condition are virtually identical to Study 1 except for the inclusion of several more choices of values in the self-affirmation exercise.

Respondents were also randomly assigned to see a graph depicting the U.S. jobs trend and asked to assess the trend.

**Sample**

This study was conducted using Qualtrics with participants from Mechanical Turk (N = 247). In our sample, 41% of respondents were 18-29, 43% were 30-49, and 16% were 50 and over. 56% were female, 4% were black, and 5% Hispanic. 10% had a high school degree or less, 33% had some college, and 58% had a college degree or greater. 53% identified as Democrats (with leaners), 30% as Republicans (with leaners), and 16% as independents.

**Information treatment**

Below is a graph showing the total number of jobs in the United States from January 2010 to January 2011. Please take a moment to study it before proceeding.



NOTE: The survey will allow you to move to the next page after a reasonable amount of time has elapsed. Please take all the time you need to study the graph below.

**Measures**

Our outcome measure is adapted from American National Election Study questions on economic trends (Bartels 2002) asking if the number of people with jobs in the country has gone up, stayed about the same, or gone down since January 2010. Using branching follow-ups, we constructed a five-point Likert scale ranging from “Gone up a lot” to “Gone down a lot.” As in each study, responses were coded so that higher values represent greater misperceptions (i.e. greater belief that jobs had gone down).7

**Study 3**

**Design**

We use a 2 x 3 design in which participants are randomly assigned to either a self-affirmation condition (Affirmation) or a non- affirmation control. They were also randomly assigned to see a graph or text about global temperatures, or a control.

**Sample**

The study was conducted in July–August 2011 using an online convenience sample from Qualtrics.com’s respondent panel. We limited this sample to respondents who previously self-identified as Republicans, the group that is most likely to hold inaccurate beliefs about global warming (McCright and Dunlap 2011). We also excluded respondents who failed to pass a pre-treatment attention filter designed to make sure that subjects were carefully reading survey questions.

This study was restricted to self-identified Republicans in an online convenience sample obtained from Qualtrics. As an initial check on data quality, we asked the standard ANES party identification questions. The data match the screening almost perfectly. Only five respondents (1%) self-identify as Democrats or Democratic leaners, while 2% identify as pure independents. The remaining 97% identify as Republicans – 48% as strong Republicans, 43% as weak Republicans, and 5% as Republican-leaning independents. The sample is less racially diverse (95% white) than Study 2, which was not pre-screened on party identification. However, we still see diversity in other demographics. For instance, the sample is slightly more female (51%) than male (49%) and more diverse by age than respondents in Study 2.

**Procedure**

The self-affirmation treatment and control conditions are identical to those in Study 2. Participants then viewed either a graph or text describing surface temperature trends, or a control condition.

**Information treatments**

*Graph treatment*

Now we would like to turn to a different topic.

Below is a graph showing changes in average global surface temperatures since 1940. Please take a moment to study it before proceeding. (Note: A change of 1 degree Celsius = 1.8 degrees Fahrenheit.)



*Text treatment*

Now we would like to turn to a different topic.

Below is information about changes in average global surface temperatures since 1940. Please take a moment to study it before proceeding. (Note: A change of 1 degree Celsius = 1.8 degrees Fahrenheit.)

Groups of scientists from several major institutions — NASA's Goddard Institute for Space Studies, the National Oceanic and Atmospheric Administration's National Climatic Data Center, the Japanese Meteorological Agency and the Met Office Hadley Centre in the United Kingdom — tally data collected by temperature monitoring stations spread around the world. All four records show peaks and valleys that vary in virtual sync with each other. They each show an increase in average global surface temperatures of approximately 0.5 degrees Celsius over the last three decades. Data from each source also indicate that the last decade is the warmest since 1940.

**Measures**

***Dependent variables***

In this study, we measure respondents’ perceptions of global temperature change as well as their more general beliefs about global warming, a more politically salient topic where people might be more prone to motivated reasoning. The first outcome measure, Temperature change, asks if average global surface temperatures have gone up, stayed about the same, or gone down in the last 30 years. Using branching follow-ups, we construct a five- point Likert scale ranging from “Gone down a lot” to “Gone up a lot” where higher values indicate greater misperceptions (temperatures decreased significantly). Our second dependent variable, Global warming, asks respondents whether they believe global warming is a theory that has not yet been proven, a proven fact caused mostly by natural changes that have nothing to do with emissions from cars and industrial facilities, or a proven fact mostly caused by emissions from cars and industrial facilities. We ask this question before and after the experimental manipulations (the pre-treatment question is a control variable in analyses below). Both variables are coded so that higher values represent more misinformed views.

Moderator: Strength of party affiliation (2-pt.)

Results

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  |  |  |  |  |  |
| **Nyhan and Reifler - Misperceptions** |  |  |  |  |
|  |  |  |  |  |  |
|   | Study 1: Attacks after troop surge |
|   | B | Robust SE | p | 95% CI |
| Self-Affirmation | 0.00 | 0.04 | 0.928 | -0.08 | 0.09 |
| Iraq withdrawl | 0.11 | 0.02 | 0.000 | 0.08 | 0.15 |
| Affirmation x withdrawal | 0.00 | 0.02 | 0.879 | -0.04 | 0.05 |
| Constant | -0.06 | 0.03 | 0.027 | -0.12 | -0.01 |
| N |  |  |  |  | 525 |
| R2 |   |   |   |   | 0.13 |
|  |  |  |  |  |  |
|   | Study 2: Jobs trend |
|   | B | Robust SE | p | 95% CI |   |
| Self-Affirmation | -0.02 | 0.05 | 0.656 | -0.13 | 0.08 |
| Economy import | 0.03 | 0.03 | 0.280 | -0.03 | 0.09 |
| Obama disapproval | -0.06 | 0.03 | 0.053 | -0.12 | 0.00 |
| Affirmation x economy | 0.01 | 0.06 | 0.802 | -0.10 | 0.12 |
| Affirmation x disapproval | 0.02 | 0.06 | 0.764 | -0.10 | 0.13 |
| Constant | 0.76 | 0.03 | 0.000 | 0.70 | 0.82 |
| N |  |  |  |  | 247 |
| R2 |   |   |   |   | 0.03 |
|  |  |  |  |  |  |
|   | Study 3: Global warming (text) |
|   | B | Robust SE | p | 95% CI |
|  |  |  |  |  |  |
| Self-Affirmation | -0.03 | 0.13 | 0.795 | -0.29 | 0.22 |
| Strong Republican | 0.13 | 0.11 | 0.241 | -0.09 | 0.34 |
| Affirmation x strong Republican | -0.05 | 0.17 | 0.756 | -0.38 | 0.28 |
| Constant | 0.58 | 0.08 | 0.000 | 0.43 | 0.73 |
| N |  |  |  |  | 122 |
| R2 |   |   |   |   | 0.02 |
|  |  |  |  |  |  |
|   | Study 3: Global warming (graph) |
| Self-Affirmation | 0.14 | 0.11 | 0.214 | -0.08 | 0.37 |
| Strong Republican | 0.16 | 0.11 | 0.150 | -0.06 | 0.37 |
| Affirmation x strong Republican | -0.31 | 0.15 | 0.044 | -0.62 | -0.01 |
| Constant | 0.48 | 0.08 | 0.000 | 0.31 | 0.65 |
| N |  |  |  |  | 122 |
| R2 |   |   |   |   | 0.03 |
|  |  |  |  |  |  |
|   | Study 3: Temperature trend (text) |
| Self-Affirmation | -0.03 | 0.06 | 0.566 | -0.15 | 0.08 |
| Strong Republican | 0.02 | 0.05 | 0.607 | -0.07 | 0.12 |
| Affirmation x strong Republican | -0.03 | 0.08 | 0.713 | -0.19 | 0.13 |
| Constant | 0.41 | 0.03 | 0.000 | 0.35 | 0.47 |
| N |  |  |  |  | 122 |
| R2 |   |   |   |   | 0.01 |
|  |  |  |  |  |  |
|   | Study 3: Temperature trend (graph) |
| Self-Affirmation | 0.05 | 0.06 | 0.438 | -0.07 | 0.16 |
| Strong Republican | 0.01 | 0.06 | 0.852 | -0.10 | 0.12 |
| Affirmation x strong Republican | -0.06 | 0.08 | 0.468 | -0.23 | 0.10 |
| Constant | 0.23 | 0.04 | 0.000 | 0.15 | 0.31 |
| N |  |  |  |  | 121 |
| R2 |   |   |   |   | 0.01 |
|  |  |  |  |  |  |
|  |  |  |  |  |  |

**Raimi and Hall**

**Hypotheses:**

*H1: Self-Affirmation Will Mitigate Belief Superiority*

People exposed to a self-affirmation intervention will be less likely than those in a control condition to report that their beliefs on immigration are superior (aka, that those beliefs are more correct than alternatives).

*H2: Self-Affirmation Will Mitigate Belief Extremity*

People exposed to a self-affirmation intervention (vs. control) will also report less extreme beliefs on immigration.

*H3. Self-Affirmation Effects Will Be Stronger Among Strong Partisans than Weak Partisans*

The magnitude of the effects of the self-affirmation intervention on belief superiority and extremity will be greater for participants who have stronger partisan beliefs than those with weaker beliefs.

**Design**

This was a two-condition between-subjects survey experiment. Respondents were randomly assigned to either a self-affirmation condition in which they were asked to recall examples of their most highly cherished characteristic or a control condition.

**Sample**

Participants were recruited from Amazon Mechanical Turk. This dataset includes 400 participants in the Control (n = 219) and Self-Affirmation (n = 181) conditions.

**Procedure**

Participants were told at the outset that this was a study about "the nature of attitudes and beliefs about a variety of political topics in the United States." Participants provided responses to demographics, moderators, the self-affirmation exercise, dependent variables, an attention check, and a quality check.

For Control, participants were asked to write down as many types of automobiles in the free-entry space as they could, and the Qualtrics page was time-locked for three minutes before they could move on.  For Self-Affirmation, participants were asked to rank 11 areas of values/characteristics about themselves (all available in dataset), and then to describe three personal experiences in which they exhibited the value/characteristic that they ranked as most important.

**Measures**

***Dependent measures:***

Belief extremity was computed by squaring the centered version of a 7-pt. immigration belief measure (M = 3.06, SD = 3.59). This immigration belief measures asked participants to indicate their agreement with the following statement: “The government should do more to secure U.S. borders to halt the flow of undocumented immigrants.”

Belief superiority was captured by asking, “How much more correct are your views on immigration than other beliefs about this issue?” Participants responded to both measures using a 5-point scale (1 = *no more correct than other viewpoints*; 5 = *totally correct – mine is the only correct view*; M = 2.34, SD = 1.24).

***Moderator:***

Strength of partisanship (3-pt.)

Results

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  |  |  |  |  |  |
| **Raimi and Hall - Immigration belief superiority** |  |  |  |
|   | Belief superiority |
|   | B | Robust SE | p | 95% CI |
| Self-Affirmation | -0.02 | 0.06 | 0.715 | -0.15 | 0.10 |
| Strength of partisanship | 0.03 | 0.03 | 0.267 | -0.03 | 0.09 |
| Affirmation X strength | -0.01 | 0.04 | 0.780 | -0.09 | 0.07 |
| Constant | 0.31 | 0.05 | 0.000 | 0.21 | 0.40 |
| N |  |  |  |  | 393 |
| R2 |   |   |   |   | 0.01 |
|  |  |  |  |  |  |
|   | Belief extremity |
| Self-Affirmation | -0.01 | 0.05 | 0.829 | -0.12 | 0.09 |
| Strength of partisanship | 0.01 | 0.02 | 0.694 | -0.03 | 0.05 |
| Affirmation X strength | 0.00 | 0.03 | 0.883 | -0.07 | 0.06 |
| Constant | 0.20 | 0.03 | 0.000 | 0.13 | 0.27 |
| N |  |  |  |  | 393 |
| R2 |   |   |   |   | 0.00 |
|  |  |  |  |  |  |

**Skytte**

**Research Question:**

*RQ1. Does self-affirmation reduce affective polarization?*

**Design**

2 cell between-subjects survey experiment. One manipulation randomly assigned respondents to an affirmation condition in which they were asked to recall an experience in which a self-chosen value played an important role in their life (affirmation) or a control condition.

**Sample**

349 participants (56% male, mean age 35) were recruited through Amazon’s Mechanical Turk on August 1-2 2016.

**Procedure**

Participants first answered background questions, including a 7-point party identification question, and were then assigned to experimental conditions.

Participants in the affirmation condition were provided with a list of values and characteristics and asked to choose the one most important to them:

“Below is a list of characteristics and values, some of which may be important to you, some of which may be unimportant. Please read the list carefully, and then indicate which value or quality is most important to you.”

Response options were: “artistic skills/aesthetic appreciation,” “sense of humor,” “relations with friends/family,” “spontaneity/living life in the moment,” “social skills,” “athletics,” “musical ability/appreciation,” “physical attractiveness,” “creativity,” “business/managerial skills,” and “romantic values.”

Participants in the affirmation condition were then instructed to write a brief account about why their chosen value is important to them:

“You answered that [chosen value/characteristic] is most important to you. Please write a brief account (minimum 250 characters ∼ 40 words) of why this value is important to you and a time when it played an important role in your life. Like the rest of the survey, your answer is completely anonymous and will not be made public.”

Participants in the control group were asked to choose the value or characteristic “least important to you” and to write an account of “why this value might be important to another person of about your age.” The treatment resembles the treatment used by Cohen, Aronson and Steele (2000) in their third study.

Questions measuring the dependent variables (affective polarization and out-party intolerance) followed immediately after the writing task. Before finishing the survey, respondents were also assigned to one of two information conditions (mock news articles about capital punishment, also inspired by Cohen et al. 2000) and asked questions about the trustworthiness of the information, but several participants reported that the information did not load properly. Hence, the analysis focuses only on the effect on affective polarization and out-party intolerance.

**Measures**

***Dependent variables***

To measure affective polarization, two different measures were used. The first is via 100-pt. feeling thermometer attitudes towards own party and its presidential candidate and feeling thermometer attitudes toward other party and its presidential candidate. These two difference scores (between parties (M 41.77, SD = 29.72) and candidates (M = 41.83, SD = 37.45)) were averaged (alpha = .68) and rescaled to range from 0-1.

The second approach used two items measuring intolerance towards party identifiers from opposing party. The first item was “Although I am a [Republican], I think that many [Democrats] have good reasons for holding the political views that they do”, on a 7-pt. Likert scale, reversed and rescaled to range from 0-1, M = .48, SD= .26). The second item was “On average, [Republicans] are less informed about society and politics than [Democrats]" also on a 7-pt. Likert scale, rescaled to range from 0-1, M = .59, SD= .27). Leaners did not answer these questions and are, therefore, excluded from the analysis.

***Moderator***

Strength of partisanship (2-pt.). The full wording of the question was: “Generally speaking, do you usually think of yourself as a Republican, a Democrat, or an independent?” Response options were: “Strong Republican,” “Republican,” “Independent leaning Republican,” “Independent,” “Independent leaning Democrat,” “Democrat,” “Strong Democrat,” and “Something else.”

Results

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  |  |  |  |  |  |
| **Skytte - Affective polarization** |  |  |  |  |  |
|   | Affective polarization (FTs) |
|   | B | Robust SE | p | 95% CI |
| Self-Affirmation | 0.00 | 0.03 | 0.999 | -0.06 | 0.06 |
| Strength of partisanship | 0.16 | 0.03 | 0.000 | 0.09 | 0.22 |
| Affirmation X strength | -0.02 | 0.05 | 0.610 | -0.12 | 0.07 |
| Constant | 0.63 | 0.02 | 0.000 | 0.58 | 0.67 |
| N |  |  |  |  | 204 |
| R2 |   |   |   |   | 0.15 |
|  |  |  |  |  |  |
|   | Outparty intolerance (item 1)) |
| Self-Affirmation | 0.03 | 0.04 | 0.484 | -0.05 | 0.11 |
| Strength of partisanship | 0.15 | 0.06 | 0.007 | 0.04 | 0.27 |
| Affirmation X strength | -0.08 | 0.08 | 0.347 | -0.23 | 0.08 |
| Constant | 0.42 | 0.03 | 0.000 | 0.37 | .47 |
| N |  |  |  |  | 204 |
| R2 |   |   |   |   | 0.05 |
|  |  |  |  |  |  |
|   | Outparty intolerance (item 2) |
| Self-Affirmation | -0.12 | 0.05 | 0.783 | -0.10 | 0.08 |
| Strength of partisanship | 0.10 | 0.05 | 0.074 | -0.01 | 0.21 |
| Affirmation X strength | 0.00 | 0.08 | 0.983 | -0.16 | 0.16 |
| Constant | 0.56 | 0.03 | 0.000 | 0.51 | 0.62 |
| N |  |  |  |  | 203 |
| R2 |   |   |   |   | 0.03 |
|  |  |  |  |  |  |

**Zhao**

**Hypotheses and Research Question:**

*H1. The expectation is that self-affirmation will reduce message derogation toward the counter-attitudinal article, thus narrowing the evaluation gap between pro- and counter-attitudinal articles.*

*RQ1. The relevant vs. irrelevant self-affirmation manipulation was considered an open research question. It is possible that the relevant self-affirmation (by priming political values) will exacerbate, rather than reduce, biased processing. But with the lack of clarity in the literature regarding related vs. unrelated self-affirmation, I am not comfortable enough to advance a firm hypothesis.*

**Design**:

3 (Affirmation: control vs. irrelevant vs. relevant) X 2 (article type: real vs. hoax) factorial design.

**Sample**: A convenience sample of the general public recruited by undergraduate students in a research methods class (N = 455). Participants completed study online using SurveyMonkey. No compensation was provided. Data were collected in 2013.

**Procedures**:

Study began with an affirmation task (essay writing in response to two short prompts – why something is important or good and describe an experience with it)

• Control condition wrote about a fruit that is ranked third on a list of 5 (apple, banana, etc.)

• Irrelevant condition wrote about top-ranked positive personal trait out of 5 (eg kindness, honesty)

• Relevant condition wrote about a top-ranked social political value out of 5 (social equality, gay rights, right to bear arms, etc.)

After self-affirmation, participants were randomly assigned to read one of two news articles

• Climate change is real and should be addressed now

• Facts and hype about climate change (essentially suggesting climate change is a hoax)

After reading the article, participants rated the article on a number of dimensions, including credibility, whether it exaggerated things, and how much they liked it.

**Measures**

***Dependent variables***

The primary dependent variable is a scale of 16 7-pt Likert news evaluation items (M = 3.83, SD = 1.03, alpha = .84). This composite scale is the average of liking (1 item; M = 3.80, SD = 1.38), a credibility scale (7 items; M = 3.77, SD = 1.11, alpha = .84) and a perceived message quality scale (8 items; M = 3.91, SD = 1.02, alpha = .85).

***Moderator***

Party (Republican, Democrat, Independent). All models use Republican as moderator of self-affirmation effects.

Results

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  |  |  |  |  |  |
| **Zhao - News evaluations**  |  |  |  |  |  |
|   | News evaluations (Climate change is a hoax) |
|   | B | Robust SE | p | 95% CI |
|  |  |  |  |  |  |
| Self-Affirmation | -0.02 | 0.03 | 0.619 | -0.08 | 0.05 |
| Political Self-Affirmation | -0.00 | 0.03 | 0.914 | -0.07 | 0.06 |
| Republican | -0.08 | 0.04 | 0.058 | -0.161 | 0.060 |
| Affirmation x Repub | 0.02 | 0.06 | 0.719 | -0.10 | 0.14 |
| Political affirmation x Repub | -0.01 | 0.06 | 0.825 | -0.13 | 0.10 |
| Constant | 0.51 | 0.02 | 0.000 | 0.46 | 0.56 |
| N |  |  |  |  | 235 |
| R2 |   |   |   |   | 0.04 |
|  |  |  |  |  |  |
|   | News evaluations (Climate change is real) |
| Self-Affirmation | 0.03 | 0.03 | 0.390 | -0.04 | 0.09 |
| Political Self-Affirmation | -0.04 | 0.03 | 0.230 | -0.11 | 0.03 |
| Republican | 0.06 | 0.04 | 0.133 | -0.02 | 0.15 |
| Affirmation x Repub | 0.02 | 0.06 | 0.700 | -0.10 | 0.14 |
| Political affirmation x Repub | 0.07 | 0.06 | 0.250 | -0.05 | 0.20 |
| Constant | 0.41 | 0.02 | 0.000 | 0.37 | 0.46 |
| N |  |  |  |  | 220 |
| R2 |   |   |   |   | 0.08 |
|  |  |  |  |  |  |

**Reanalysis of affirmation effects across information treatments**

**Nyhan and Reilfer – Misperceptions**

|  |  |
| --- | --- |
|  | Study 1: Attacks after troop surge |
|   | B | Robust SE | p | 95% CI |
| Self-affirmation | -0.02 | 0.04 | 0.659 | -0.11 | 0.07 |
| Iraq withdrawal | 0.13 | 0.01 | 0.000 | 0.11 | 0.16 |
| Affirmation x withdrawal | -0.02 | 0.02 | 0.420 | -0.06 | 0.02 |
| Graph | -0.09 | 0.02 | 0.000 | -0.14 | -0.05 |
| Affirmation X graph | 0.06 | 0.05 | 0.275 | -0.05 | 0.17 |
| Affirmation X graph X withdrawal | 0.00 | 0.03 | 0.882 | -0.05 | 0.05 |
| Constant | -0.01 | 0.03 | 0.843 | -0.06 | 0.05 |
| N |  |  |  |  | 987 |
| R2 |   |   |   |   | 0.16 |

|  |  |
| --- | --- |
|  | Study 2: Jobs trend |
|   | B | Robust SE | p | 95% CI |
| Self-affirmation | -0.01 | 0.05 | 0.785 | -0.10 | 0.08 |
| Graph | 0.29 | 0.03 | 0.000 | 0.24 | 0.34 |
| Economy import | -0.02 | 0.03 | 0.439 | -0.08 | 0.03 |
| Obama disapproval | -0.12 | 0.03 | 0.000 | -0.18 | -0.07 |
| Affirmation X economy | -0.03 | 0.05 | 0.605 | -0.13 | 0.08 |
| Affirmation X disapproval | 0.08 | 0.05 | 0.162 | -0.03 | 0.18 |
| Affirmation X graph | -0.06 | 0.06 | 0.301 | -0.19 | 0.06 |
| Affirmation X graph X economy | 0.10 | 0.06 | 0.141 | -0.03 | 0.22 |
| Affirmation X graph X disapproval | 0.01 | 0.07 | 0.912 | -0.13 | 0.14 |
| Constant | 0.53 | 0.03 | 0.000 | 0.47 | 0.58 |
| N |  |  |  |  | 471 |
| R2 |   |   |   |   | 0.31 |

|  |  |
| --- | --- |
|   | Study 3: Temperature trend |
|   | B | Robust SE | p | 95% CI |
| Self-affirmation | -0.08 | 0.06 | 0.157 | -0.19 | 0.03 |
| Strong Republican | -0.01 | 0.03 | 0.794 | -0.08 | 0.06 |
| Affirmation X strong Republican | 0.16 | 0.07 | 0.031 | 0.01 | 0.30 |
| Graph | -0.11 | 0.02 | 0.000 | -0.15 | -0.07 |
| Text | -0.04 | 0.04 | 0.393 | -0.12 | 0.05 |
| Affirmation X text | 0.03 | 0.08 | 0.671 | -0.12 | 0.19 |
| Affirmation X graph | 0.06 | 0.04 | 0.125 | -0.02 | 0.13 |
| Affirmation X text x strong Rep. | -0.15 | 0.09 | 0.091 | -0.33 | 0.02 |
| Affirmation X graph x strong Rep. | -0.10 | 0.04 | 0.025 | -0.19 | -0.01 |
| Constant | 0.46 | 0.04 | 0.000 | 0.39 | 0.53 |
| N |  |  |  |  | 357 |
| R2 |   |   |   |   | 0.14 |
|  |  |  |  |  |  |
|   | Study 3: Global warming |
| Self-affirmation | -0.13 | 0.10 | 0.216 | -0.33 | 0.08 |
| Strong Republican | 0.07 | 0.06 | 0.274 | -0.05 | 0.19 |
| Affirmation X strong Republican | 0.15 | 0.12 | 0.238 | -0.10 | 0.39 |
| Graph | -0.07 | 0.04 | 0.065 | -0.14 | 0.00 |
| Text | -0.06 | 0.07 | 0.417 | -0.20 | 0.08 |
| Affirmation X text | 0.07 | 0.15 | 0.653 | -0.23 | 0.37 |
| Affirmation X graph | 0.11 | 0.07 | 0.108 | -0.02 | 0.25 |
| Affirmation X text x strong Rep. | -0.14 | 0.17 | 0.409 | -0.47 | 0.19 |
| Affirmation X graph x strong Rep. | -0.18 | 0.08 | 0.017 | -0.33 | -0.03 |
| Constant | 0.66 | 0.06 | 0.000 | 0.56 | 0.77 |
| N |  |  |  |  | 358 |
| R2 |   |   |   |   | 0.03 |

**Zhao– News evaluations**

|  |  |
| --- | --- |
|  | News evaluations |
|   | B | Robust SE | p | 95% CI |
| Self-affirmation | 0.07 | 0.09 | 0.463 | -0.11 | 0.24 |
| Message (CC real vs hoax) | -0.07 | 0.04 | 0.056 | -0.14 | 0.00 |
| Political affirmation | 0.01 | 0.04 | 0.848 | -0.06 | 0.08 |
| Self-affirmation X message | -0.02 | 0.06 | 0.671 | -0.14 | 0.09 |
| Constant | 0.56 | 0.06 | 0.000 | 0.43 | 0.68 |
| N |  |  |  |  | 129 |
| R2 |   |   |   |   | 0.07 |

Note: Only republican respondents included in model to examine whether affirmation reduces rejection of climate change is real message.

**Descriptive statistic/balance tables**

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Farhart et al. |  |  |  |  |  |  |  |  |  |  |
|  | **Self-affirmation** | **Control** |
| **Variable** | **N** | **M** | **SD** | **Min** | **Max** | **N** | **M** | **SD** | **Min** | **Max** |
| Lib. Conspiracies | 2106 | 0.45 | 0.19 | 0 | 1 | 2237 | 0.45 | 0.19 | 0 | 1 |
| Cons. Conspiracies | 2106 | 0.36 | 0.20 | 0 | 1 | 2238 | 0.35 | 0.19 | 0 | 1 |
| Age | 2060 | 34.80 | 11.82 | 18 | 84 | 2190 | 35.14 | 11.71 | 18 | 80 |
| Female | 2058 | 0.60 | 0.49 | 0 | 1 | 2192 | 0.59 | 0.49 | 0 | 1 |
| Republican | 1865 | 0.34 | 0.47 | 0 | 1 | 1933 | 0.32 | 0.47 | 0 | 1 |
| Education (median) | 2054 | Some college or AA |  |  |  | 2179 | Some college or AA |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |
| Kotcher |  |  |  |  |  |  |  |  |  |  |
|  | **Self-affirmation** | **Control** |
| **Variable** | **N** | **M** | **SD** | **Min** | **Max** | **N** | **M** | **SD** | **Min** | **Max** |
| Climate attitudes | 339 | 0.63 | 0.22 | 0 | 1 | 354 | 0.66 | 0.21 | 0 | 1 |
| Female | 343 | 0.53 | 0.50 | 0 | 1 | 354 | 0.50 | 0.50 | 0 | 1 |
| Age (median) | 343 | 45-54  |  |  |  | 354 | 45-54  |  |  |  |
| Education (median) | 343 | Some college |  |  |  | 354 | Some college |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |
| Levendusky  |  |  |  |  |  |  |  |  |  |  |
|  | **Self-affirmation** | **Control** |
| **Variable** | **N** | **M** | **SD** | **Min** | **Max** | **N** | **M** | **SD** | **Min** | **Max** |
| Affect. Polar. | 658 | 0.69 | 0.17 | 0.1 | 1 | 676 | 0.68 | 0.17 | 0 | 1 |
| Discuss. Polar. | 663 | 0.63 | 0.19 | 0 | 1 | 675 | 0.63 | 0.19 | 0 | 1 |
| Outparty danger | 664 | 0.74 | 0.25 | 0 | 1 | 681 | 0.74 | 0.24 | 0 | 1 |
| Social distance | 655 | 0.25 | 0.26 | 0 | 1 | 678 | 0.26 | 0.26 | 0 | 1 |
| Party strength | 670 | 1.99 | 0.84 | 1 | 3 | 686 | 1.89 | 0.85 | 1 | 3 |
| Age | 670 | 50.69 | 17.79 | 18 | 93 | 686 | 50.52 | 17.57 | 18 | 89 |
| Female | 670 | 0.50 | 0.50 | 0 | 1 | 686 | 0.50 | 0.50 | 0 | 1 |
| Education (median) | 670 | Some college |  |  |  | 686 | Some college |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |
| Lyons 1 |  |  |  |  |  |  |  |  |  |  |
|  | **Self-affirmation** | **Control** |
| **Variable** | **N** | **M** | **SD** | **Min** | **Max** | **N** | **M** | **SD** | **Min** | **Max** |
| Party-aligned belief | 71 | 0.39 | 0.19 | 0 | 1 | 59 | 0.45 | 0.21 | 0 | 1 |
| Party strength | 71 | 0.35 | 0.48 | 0 | 1 | 59 | 0.27 | 0.45 | 0 | 1 |
| Age | 71 | 37.00 | 12.16 | 21 | 65 | 59 | 35.27 | 11.13 | 19 | 74 |
| Female | 71 | 0.49 | 0.50 | 0 | 1 | 59 | 0.54 | 0.50 | 0 | 1 |
| Education (median) | 71 | BA or AA |  |  |  | 59 | BA or AA |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |
| Lyons 2 |  |  |  |  |  |  |  |  |  |  |
|  | **Self-affirmation** | **Control** |
| **Variable** | **N** | **M** | **SD** | **Min** | **Max** | **N** | **M** | **SD** | **Min** | **Max** |
| Party-aligned belief | 130 | 0.59 | 0.18 | 0 | 1 | 144 | 0.60 | 0.17 | 0 | 1 |
| Party strength | 130 | 0.53 | 0.50 | 0 | 1 | 144 | 0.56 | 0.50 | 0 | 1 |
| Age | 129 | 39.65 | 12.69 | 18 | 77 | 144 | 38.38 | 13.10 | 20 | 73 |
| Female | 130 | 0.52 | 0.50 | 0 | 1 | 144 | 0.50 | 0.50 | 0 | 1 |
| Education (median) | 130 | BA or AA |  |  |  | 144 | BA or AA |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |
| Nyhan & Reifler 1 |  |  |  |  |  |  |  |  |  |  |
|  | **Self-affirmation** | **Control** |
| **Variable** | **N** | **M** | **SD** | **Min** | **Max** | **N** | **M** | **SD** | **Min** | **Max** |
| Attacks/surge | 476 | 0.20 | 0.31 | 0 | 1 | 514 | 0.21 | 0.30 | 0 | 1 |
| Female | 479 | 0.52 | 0.50 | 0 | 1 | 521 | 0.51 | 0.50 | 0 | 1 |
| Iraq withdraw | 477 | 2.10 | 0.93 | 1 | 3 | 520 | 2.04 | 0.93 | 1 | 3 |
| Age (median) | 477 | 35-54 |  |  |  | 521 | 35-54 |  |  |  |
| Education (median) | 477 | Some college or AA |  |  |  | 521 | Some college or AA |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |
| Nyhan & Reifler 2 |  |  |  |  |  |  |  |  |  |  |
|  | **Self-affirmation** | **Control** |
| **Variable** | **N** | **M** | **SD** | **Min** | **Max** | **N** | **M** | **SD** | **Min** | **Max** |
| Jobs trend | 213 | 0.61 | 0.27 | 0 | 1 | 258 | 0.63 | 0.26 | 0 | 1 |
| Female | 213 | 0.58 | 0.50 | 0 | 1 | 259 | 0.55 | 0.50 | 0 | 1 |
| Econ MIP | 213 | 0.49 | 0.50 | 0 | 1 | 259 | 0.50 | 0.50 | 0 | 1 |
| Obama disapprove | 213 | 0.39 | 0.49 | 0 | 1 | 259 | 0.39 | 0.49 | 0 | 1 |
| Education (median) | 213 | BA |  |  |  | 259 | BA |  |  |  |
| Age (median)  | 213 | 30-39 |  |  |  | 259 | 30-39 |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |
| Nyhan & Reifler 3 |  |  |  |  |  |  |  |  |  |  |
|  | **Self-affirmation** | **Control** |
| **Variable** | **N** | **M** | **SD** | **Min** | **Max** | **N** | **M** | **SD** | **Min** | **Max** |
| Temp. change | 171 | 0.35 | 0.25 | 0 | 1 | 186 | 0.38 | 0.25 | 0 | 1 |
| GW atts. | 173 | 0.59 | 0.44 | 0 | 1 | 185 | 0.64 | 0.41 | 0 | 1 |
| Party strength | 173 | 0.50 | 0.50 | 0 | 1 | 186 | 0.47 | 0.50 | 0 | 1 |
| Female | 173 | 0.51 | 0.50 | 0 | 1 | 186 | 0.51 | 0.50 | 0 | 1 |
| Age (median)  | 173 |  40-49  |  |  |  | 186 | 40-49 |  |  |  |
| Education (median) | 173 | AA |  |  |  | 186 | AA |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |
| Rami & Hall  |  |  |  |  |  |  |  |  |  |  |
|  | **Self-affirmation** | **Control** |
| **Variable** | **N** | **M** | **SD** | **Min** | **Max** | **N** | **M** | **SD** | **Min** | **Max** |
| Belief superiority | 180 | 0.32 | 0.30 | 0 | 1 | 219 | 0.35 | 0.32 | 0 | 1 |
| Belief extremity | 180 | 0.20 | 0.25 | 0 | 1 | 219 | 0.21 | 0.24 | 0 | 1 |
| Party strength | 179 | 1.37 | 0.80 | 0 | 2 | 215 | 1.38 | 0.78 | 0 | 2 |
| Age | 181 | 37.12 | 13.38 | 19 | 80 | 219 | 40.50 | 13.08 | 19 | 75 |
| Female | 181 | 0.52 | 0.50 | 0 | 1 | 219 | 0.50 | 0.50 | 0 | 1 |
| Education (median) | 181 | BA |  |  |  | 219 | BA |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |
| Skytte |  |  |  |  |  |  |  |  |  |  |
|  | **Self-affirmation** | **Control** |
| **Variable** | **N** | **M** | **SD** | **Min** | **Max** | **N** | **M** | **SD** | **Min** | **Max** |
| Affect. Polar.  | 98 | 0.67 | 0.18 | 0 | 1 | 106 | 0.68 | 0.18 | 0 | 1 |
| Outparty intolernace (1) | 98 | 0.47 | 0.26 | 0 | 1 | 106 | 0.48 | 0.27 | 0 | 1 |
| Outparty intolernace (2) | 97 | 0.59 | 0.28 | 0 | 1 | 106 | 0.60 | 0.26 | 0 | 1 |
| Age | 99 | 35.63 | 10.59 | 21 | 64 | 107 | 33.62 | 10.39 | 18 | 65 |
| Female | 99 | 0.48 | 0.50 | 0 | 1 | 107 | 0.45 | 0.50 | 0 | 1 |
| Party strength | 98 | 0.34 | 0.48 | 0 | 1 | 106 | 0.37 | 0.48 | 0 | 1 |
|  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |
| Zhao |  |  |  |  |  |  |  |  |  |  |
|  | **Self-affirmation** | **Control** |
| **Variable** | **N** | **M** | **SD** | **Min** | **Max** | **N** | **M** | **SD** | **Min** | **Max** |
| News evaluation | 149 | 0.47 | 0.17 | 0 | 1 | 155 | 0.46 | 0.17 | 0 | 1 |
| Female | 149 | 0.67 | 0.47 | 0 | 1 | 155 | 0.71 | 0.46 | 0 | 1 |
| Age | 149 | 33.89 | 15.70 | 17 | 86 | 155 | 30.52 | 13.12 | 17 | 68 |
| Republican | 149 | 0.28 | 0.45 | 0 | 1 | 155 | 0.32 | 0.47 | 0 | 1 |
| Education (median) | 149 | BA |  |  |  | 155 | BA |  |  |  |

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