Political Orientation Predicts Credulity Regarding Putative Hazards

Daniel M.T. Fessler[a,1], Anne C. Pisor,[b,c] and Colin Holbrook[a]

[a] Department of Anthropology and Center for Behavior, Evolution, & Culture

University of California, Los Angeles

Los Angeles, CA 90095-1553 USA

[b] Department of Anthropology

University of California, Santa Barbara

Santa Barbara, CA 93106-3210 USA

[c] Department of Human Behavior, Ecology, and Culture

Max Planck Institute for Evolutionary Anthropology

04103 Leipzig, Germany

[1] To whom correspondence should be addressed:
Department of Anthropology
341 Haines Hall
University of California, Los Angeles
Los Angeles, CA 90095-1553 USA
Tel.: 310 794-9252
Fax: 310 206-7833
E-mail: dfessler@anthro.ucla.edu

Accepted for publication in Psychological Science

The instruments described in this paper are included in the Supplementary Online Materials, and are also archived at osf.io/qqq82. The complete datasets, lists of variables, and analytic code are archived at osf.io/qqq82 and http://escholarship.org/uc/item/82j5p9r3

Abstract

To benefit from information provided by others, people must be somewhat credulous. However, credulity entails risks. The optimal level of credulity depends on the relative costs of believing misinformation versus failing to attend to accurate information. When information concerns hazards, erroneous incredulity is often more costly than erroneous credulity, as disregarding accurate warnings is more harmful than adopting unnecessary precautions. Because no equivalent asymmetry characterizes information concerning benefits, people should generally be more credulous of hazard information than of benefit information. This adaptive negatively-biased credulity is linked to negativity bias in general, and is more prominent among those who believe the world to be dangerous. Because both threat sensitivity and dangerous-world beliefs differ between conservatives and liberals, we predicted that conservatism would positively correlate with negatively-biased credulity. Two online studies of Americans support this prediction, potentially illuminating the impact of politicians' alarmist claims on different portions of the electorate.

Keywords: threat sensitivity; negativity bias; negatively-biased credulity; political orientation

In 2012, a liberal professor wrote that the Obama Administration was stockpiling ammunition, preparing for totalitarian rule. This idea was ignored by liberals. In 2015, conservative bloggers asserted that a military exercise aimed to occupy Texas and impose martial law. Conservatives became so concerned that the Texas Governor ordered the State Guard to monitor the exercise.

The different fates of these two conspiracy theories might simply reflect their historical particulars. Whereas in 2012 liberal Americans largely approved of the Obama Administration, in 2015 most conservative Americans did not. Perhaps the first theory died while the second prospered simply because the latter resonated with the views of a substantial audience while the former did not. However, two bodies of research suggest that psychological differences related to political orientation may also have been at work. First, a sizeable literature documents that, in the U.S., responsiveness to negative stimuli correlates with political orientation, with conservatives displaying more responsiveness, and liberals displaying less. Second, recent studies indicate that people are more credulous of information concerning hazards than of information concerning benefits – and individuals differ in this regard. Here, we combine these approaches, testing the hypothesis that political orientation is correlated with differences in credulity toward hazard information. If correct, this thesis potentially illuminates the differential impacts that politicians' alarmist claims have on liberal and conservative constituencies.

We employ the terms "liberal" and "conservative" recognizing that these are heterogeneous categories, and that self-identifying members of each may hold internally incompatible positions on various issues; we view these features as a source of noise, hence any differences found despite them constitute foundational orientations shared by core groups of category members (Weeden & Kurzban, 2016). Research has revealed psychological differences

between liberals and conservatives, including both broad features of personality (Carney, Jost, Gosling, & Potter, 2008) and the priority given to different moral principles (Graham, Haidt, & Nosek, 2009). Reviewing a large number of studies, Hibbing, Smith, and Alford (2014) concluded that conservatives display greater "negativity bias" than do liberals (or, perhaps more precisely, "threat bias" [Lilienfeld & Latzman, 2014], i.e., sensitivity to the possibility of danger). Subsequent research has largely bolstered this conclusion (Ahn et al., 2014; Mills, Smith, Hibbing, & Dodd, 2014; Mills et al., 2016; but see Knoll, O'Daniel, & Cusato, 2015).

Like other animals, humans exhibit negativity bias – compared to positive events, negative events capture attention and information processing more readily, elicit strong emotions more easily, and are more memorable (Rozin & Royzman, 2001; Baumeister, Bratslavsky, Finkenauer, & Vohs, 2001). If valence indexes the biological fitness implications that a class of events would have had in ancestral environments, then this pattern is explicable in evolutionary terms as stemming from the generally greater detrimental fitness consequences of failing to immediately attend to, address, and learn from fitness-reducing events compared to failing to do so for fitness-enhancing events, as threats frequently both are more imminent than, and preclude, opportunities (Rozin & Royzman, 2001; Baumeister et al., 2001). Within a species, the optimal level of negativity bias will depend on the interaction of features of both the individual and the environment (e.g., a vulnerable individual in a hazardous environment should be guided by greater negativity bias than a robust individual in a safe environment, etc.) – there is no invariantly "correct" degree of negativity bias. Consonant with this, there are substantial individual differences in negativity bias. If a core dimension of political orientation is that liberals value the opportunities afforded by change and cultural heterogeneity, whereas conservatives value the safety of tradition and cultural homogeneity, then conservatism is more

92 consonant with pronounced negativity bias than is liberalism, as conservatives will often see
93 pitfalls where liberals see promise (Hibbing et al., 2014).
94 While the evolutionary considerations underlying negativity bias apply across species, in
95 humans they intersect with our reliance on cultural information. Our species uniquely exploits
96 cumulative cultural evolution and the technological and organizational advantages that it
97 provides – we are culture-dependent, a characteristic likely undergirded by specific
98 psychological mechanisms for acquiring cultural information (Fessler, 2006). Relying on
99 cultural information necessitates credulity, as the utility of a given practice is frequently not
100 evident to the learner, and is often opaque even to teachers (Boyd & Richerson, 2006).
101 However, those who are overly credulous risk acquiring erroneous information and/or being
102 exploited (Kurzban, 2007). The trade-off between the benefits of credulity and its costs varies as
103 a function of information type, such that the optimal level of credulity differs across different
104 messages. With regard to information concerning hazards, the costs of erroneous credulity will
105 often be lower than the costs of erroneous incredulity: while the former results in unnecessary
106 precautions, the latter can result in injury or death. (As these possibilities indicate, the extent of
107 the asymmetry in costs depends on the magnitude of the consequences should the information
108 prove accurate.) Because no equivalently overarching asymmetry exists with regard to
109 information concerning benefits, people should exhibit negatively-biased credulity, i.e., ceteris
110 paribus, they should more readily view as true information concerning hazards relative to
111 information concerning benefits (Fessler, Pisor, & Navarrete, 2014). Experimental results
112 confirm this – when statements are framed as being about hazards they are judged more likely to
113 be true than when they are framed as involving benefits (Fessler et al., 2014; see also Hilbig,
114 2009; Hilbig, 2012a; Hilbig, 2012b).

At the proximate level, negatively-biased credulity is explained by the greater processing fluency attending negative information, thus linking negatively-biased credulity to negativity bias in general (Hilbig, 2009; Hilbig, 2012a; Hilbig, 2012b). Given that conservatives display greater threat sensitivity, and may display greater negativity bias, than do liberals, this proximate pathway generates the prediction that conservatives will exhibit greater negatively-biased credulity than liberals. This prediction is reinforced by additional conceptual and empirical considerations.

Because newly-identified hazards often share features, and therefore co-occur, with previously-known hazards, the more dangerous the world in which one lives, the more likely that one will encounter additional hazards, and thus the greater the asymmetry between the costs of erroneous credulity and those of erroneous incredulity when assessing information concerning hazards. Accordingly, individuals who know (or believe they know) of the existence of many hazards should display elevated negatively-biased credulity. This functionality is reinforced at the proximate level, as congruence between a message and prior beliefs enhances biased credulity (White, Pahl, Buehner, & Haye, 2003). Consonant with the above, belief that the world is dangerous correlates positively with negatively-biased credulity (Fessler et al., 2014). Importantly, in keeping with conservatives' view of tradition and cultural homogeneity as buffers against an uncertain world, conservatism is linked with dangerous-world beliefs, both directly and via associations with authoritarianism (Federico, Hunt, & Ergun, 2009; relatedly, see Altemeyer, 1998; Crowson, Thoma, & Hestevold, 2005; Duckitt, 2001; Duckitt, Wagner, Du Plessis, & Birum, 2002; van Leeuwen & Park, 2009; Lilienfeld & Latzman, 2014). Hence, if conservatives view the world as more dangerous than do liberals, then conservatives should

display more negatively-biased credulity than liberals. To test this prediction, we measured negatively-biased credulity and assessed political orientation in two U.S. samples.

Study 1 Methods

Participants

On the basis of variance observed in Fessler et al. (2014) Study 2, an approximate final sample size of 450 was targeted. Expecting attrition and exclusions, in early October of 2015, 540 U.S. participants were recruited via MechanicalTurk.com in exchange for $0.50. Data were pre-screened for minimal completeness (see below), repeat participation, taking at least 3 minutes to complete the study, speaking English as a first language, and answering "catch questions" (descriptive statistics in Table S2a; predictors of exclusion reported in Table S3). The final sample consisted of 472 adults (48% female; 81% White) ranging in age from 19 to 65 (M = 36.03, SD = 11.81).

Materials and Procedure

We created a credulity scale consisting of fourteen plausible but false statements, and two true statements included to preclude deception (participants were informed that some of the statements were factual). For each of eight domains, one statement concerned a benefit and one concerned a hazard (e.g., "Eating carrots results in significantly improved vision," "Kale contains thallium, a toxic heavy metal, that the plant absorbs from soil"; see SOM for complete instrument). Participants reported judgments of truthfulness using 1-7 scales (1 = *I'm absolutely certain this statement is FALSE;* 7 = *I'm absolutely certain this statement is TRUE*). As noted earlier, the magnitude of the phenomenon addressed by a message should color credulity toward

it, as any asymmetry between the costs of erroneous credulity and erroneous incredulity will be a function of the significance of the benefit or hazard at issue. Statements were therefore selected so that, for a given domain, the presumed magnitudes of the benefit or hazard were approximately equal; additionally, participants were asked to judge these magnitudes using a 1-7 scale (1 = *The benefit [hazard] described in this statement is SMALL;* 7 = *The benefit [hazard] described in this statement is LARGE*). In cases of incomplete responses, if a participant left fewer than 10% of the items unanswered, missing responses were imputed (see SOM, Appendix 3; see Table S5 for model fits without imputation). Statements were presented in truly random order. To measure *bias* in credulity regarding hazard information relative to benefit information, in the models reported in the main text we examine the difference between hazard credulity and benefit credulity; the SOM presents complementary models respectively examining only hazard credulity or only benefit credulity as the response (Tables S6a-b).

Next, political orientation was assessed using four measures. First, participants completed a slightly updated form of Dodd et al.'s (2012) version of a Wilson and Patterson (1968) issues index (see SOM) in which participants indicate whether they agree, disagree, or are uncertain regarding 28 contemporary issues, half of which are favored by conservatives (e.g., "Biblical truth," "tax cuts"), and half of which are favored by liberals (e.g., "abortion rights," "socialism"). For each conservative topic, agreement was scored as +1 and disagreement as -1, with reverse scoring for liberal topics; "uncertain" was scored as 0. With three exceptions (see SOM Appendix 1), responses to all topics were summed such that increasingly positive values indicate greater conservatism ($\alpha = .88$). Second, using Dodd et al.'s social principles index (minus one item concerning danger – see SOM), participants selected one of two completions of the stem "Society works best when…" (e.g., "people are rewarded according to merit" versus

183 "people are rewarded according to need"). The choices are intended to capture preferences for
184 traditional social order, in-group favoritism, obedience to authority, and punishment of
185 transgressions. Typically conservative responses were coded as "1," typically liberal responses
186 were coded as "-1", then responses were summed such that larger values indicate greater
187 conservatism ($\alpha = .72$). All items and stem-completion options were presented in truly random
188 order. Any missing values were imputed if participants failed to answer less than 10% of these
189 measures (see Table S5 for fit without imputation). Third, participants indicated their political
190 position on a 9-point scale ("strongly liberal" = 1, "strongly conservative" = 9). Lastly,
191 participants reported their political party affiliation, scored as +1 for traditionally conservative
192 parties ("Republican", "Tea Party"), -1 for traditionally liberal parties ("Democrat", "Green"),
193 and 0 for Libertarians or unaffiliated individuals. Demographic items followed, including
194 parenthood status, as previous research (see Fessler, Holbrook, Pollack, & Hahn-Holbrook,
195 2014) suggests that parents may be more sensitive to the presence of hazards than non-parents.
196 Additionally, participant height and self-assessed fighting ability were collected for a future
197 study; exploratory analyses indicate these have no bearing on the results of interest here, hence
198 they are not reported. See SOM for complete survey.
199
200 **Study 1 Results**
201 To facilitate participant comprehension, in our credulity measure, for each item the low
202 end of the Likert-type scale is anchored by 1 ("I'm absolutely certain this statement is FALSE").
203 Our weighting procedure involves multiplying the participant's response on this scale by the
204 participant's assessment of the magnitude of the given hazard or benefit. Accordingly, to

preclude assigning a positive multiplicative product to items deemed entirely false by a participant, we began by subtracting 1 from all credulity responses.

Because our four measures of political orientation had disparate ranges, we z-scored each measure, performed a principal components analysis, and extracted the first component (summarizing 72.65% of the variance, each measure having a loading of 0.80 or higher) as a summary of political orientation, where higher values indicate greater conservatism. (An alternative variable created by summing the four measures together produced similar results when included in our models – see SOM Table S7.)

Employing the R statistical program version 3.3.1 (R Core Team, 2016), linear models were fit with the difference between hazard credulity (weighted by the participant's perceived magnitude for each respective item) and benefit credulity (similarly weighted) as the response. Variables that exhibited skewness were rounded down to the 97.5th percentile if negatively skewed, and up to the 2.5th percentile if positively skewed (see SOM Appendix 2). No models exhibited collinearity, i.e., none exhibited a variance inflation factor greater than 3.

Although not significant, participants tended to find our (almost entirely false) weighted credulity-scale items more believable if they concerned a hazard rather than a benefit (M_{hazard} = 12.28, $M_{benefit}$ = 11.96, $t(934.51) = 1.02$, $p = .31$). A participant's average credulity toward benefits was correlated with the participant's average credulity toward hazards, $r = .41$.

Addressing the key prediction at issue, participants who were more conservative were significantly more likely to exhibit greater credulity for information about hazards relative to information about benefits (Table 1), an effect independent of controls (Table S4). Treating hazard credulity separately from benefit credulity confirms these results: conservatism has a positive effect on hazard credulity, but no effect on benefit credulity (Tables S6a-b); this is true

even if we do not weight credulity by the participant's perceived magnitude of the hazard or benefit described in each item (Table S8) or if we treat credulity for each item as a separate response (and include a random intercept for each participant and item; Tables S9a-b). Likewise, this effect is robust to the exclusion of any single item (see Figure S1). The relationship between conservatism and negatively-biased credulity was driven predominantly by participants' responses to the Wilson-Patterson issues index (Table 2a). More specifically, items from this index addressing social conservatism predicted negatively-biased credulity; the effect of conservative views on the military, obedience to authority, and punishment was in the same direction, albeit not significant, while there was no effect of fiscal conservatism (Table 3; Figure 1a; see SOM Appendix 1 for the Wilson-Patterson issues index items by category).

(TABLES 1-3 APPEAR ON THE FOLLOWING PAGES)

Table 1. *Unstandardized Parameter Estimates, Standardized Parameter Estimates, 95% Confidence Intervals for Unstandardized Parameter Estimates, and P Values for Models with Political Summary Measure as a Predictor of the Difference between Weighted Hazard Credulity and Weighted Benefit Credulity.*

	Study 1					*Study 2*				
Variable	*Parm. Est.*	*Std. Est.*	*Lower 95%*	*Upper 95%*	*p*	*Parm. Est.*	*Std. Est.*	*Lower 95%*	*Upper 95%*	*p*
Intercept	-.27	.00	-2.09	1.54	.77	.63	.00	-1.25	2.52	.51
Polit. summ.	.36	.12	.08	.65	.01	.54	.19	.28	.81	.00

Study 1: $N = 472$. Adjusted $R^2 = .01$, $F(10, 461) = 1.66$, $p = .09$. Women, "other" ethnicity, some high school/high school diploma, and non-parents are held at zero. Age is centered such that the intercept represents age 19.

Study 2: $N = 476$. Adjusted $R^2 = .03$, $F(12, 463) = 2.09$, $p = .02$. Women, "other" ethnicity, some high school/high school diploma, and median general reasoning ability held at zero. Age is centered such that the intercept represents age 18. Parenthood status excluded for Study 2 due to large number of incompletes (see Table S10 for regression on the subset for which parenthood status was available, Study 2).

Table 2a.

Study 1: Unstandardized Parameter Estimates, Standardized Parameter Estimates, 95% Confidence Intervals for Unstandardized Parameter Estimates, and P Values for Models with Distinct Political Measures as Predictors of the Difference between Weighted Hazard Credulity and Weighted Benefit Credulity.

	Wilson-Patterson Issues					*Society Works*					*Political Likert*					*Political Category**			
Variable	*Parm Est*	*Std Est*	*5% CI*	*95% CI*	*p*	*Parm Est*	*Std Est*	*5% CI*	*95% CI*	*p*	*Parm Est*	*Std Est*	*5% CI*	*95% CI*	*p*	*Parm Est*	*5% CI*	*95% CI*	*p*
Intercept	.07	.00	-1.76	1.90	.94	.02	.00	-1.85	1.89	.98	-1.00	.00	-2.95	.95	.32	-.81	-2.69	1.07	.40
Issues	.09	.16	.04	.14	.00	---	---	---		---	---	---	---	---	---	---	---	---	---
Society	---	---	---	---	---	.09	.09	.00	.18	.05	---	---	---	---	---	---	---	---	---
Likert	---	---	---	---	---	---	---	---	---	---	.17	.07	-.05	.39	.13	---	---	---	---
Category:																			
Libert/Unaff	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	.74	-.34	1.83	.18
Conservat	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	.97	-.34	2.27	.15

$N = 472$. Wilson-Patterson Issues model: adjusted $R^2 = .02$, $F(10, 461) = 2.14$, $p = .02$. Society Works model: adjusted $R^2 = .01$, $F(10, 461) = 1.43$, $p = .17$. Political Likert model: adjusted $R^2 = .01$, $F(10, 461) = 1.27$, $p = .25$. Political Category model: adjusted $R^2 = .01$, $F(11, 460) = 1.20$, $p = .28$. *Standardized betas not provided for categorical variables.

Table 2b

Study 2: Unstandardized Parameter Estimates, Standardized Parameter Estimates, 95% Confidence Intervals for Unstandardized Parameter Estimates, and P Values for Models with Distinct Political Measures as Predictors of the Difference between Weighted Hazard Credulity and Weighted Benefit Credulity.

	Wilson-Patterson Issues					*Society Works*					*Political Likert*					*Political Category**			
Variable	*Parm Est*	*Std Est*	*5% CI*	*95% CI*	*p*	*Parm Est*	*Std Est*	*5% CI*	*95% CI*	*p*	*Parm Est*	*Std Est*	*5% CI*	*95% CI*	*p*	*Parm Est*	*5% CI*	*95% CI*	*p*
Intercept	.89	.00	-.99	2.77	.35	.82	.00	-1.09	2.74	.40	-1.03	.00	-3.11	1.06	.34	-.35	-2.33	1.64	.73
Issues	.10	.22	.06	.15	.00	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Society	---	---	---	---	---	.12	.15	.05	.20	.00	---	---	---	---	---	---	---	---	---
Likert	---	---	---	---	---	---	---	---	---	---	.33	.14	.11	.54	.00	---	---	---	---
Category:																			
Libert/Unaff	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	.77	-.31	1.84	.16
Conservat	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	1.74	.60	2.88	.00

$N = 476$. Wilson-Patterson Issues model: adjusted $R^2 = .04$, $F(12, 463) = 2.55$, $p = .003$. Society Works model: adjusted $R^2 = .01$, $F(12, 463) = 1.54$, $p = .11$. Political Likert model: adjusted $R^2 = .01$, $F(12, 463) = 1.49$, $p = .13$. Political Category model: adjusted $R^2 = .01$, $F(13, 462) = 1.37$, $p = .17$. *Standardized betas not provided for categorical variables.

Table 3. *Unstandardized Parameter Estimates, Standardized Parameter Estimates, 95% Confidence Intervals for Unstandardized Parameter Estimates, and P Values for Models with Social Conservatism, Fiscal Conservatism, and Military/Obedience/Punishment Conservatism as Predictors of the Difference between Weighted Hazard Credulity and Weighted Benefit Credulity.*

	Study 1					*Study 2*				
Variable	*Parm. Est.*	*Std. Est.*	*5% CI*	*95% CI*	*p*	*Parm. Est.*	*Std. Est.*	*5% CI*	*95% CI*	*p*
Intercept	-.44	.00	-2.25	1.37	.63	.51	.00	-1.38	2.41	.60
Social	.29	.11	.00	.58	.05	.33	.14	.07	.59	.01
Fiscal	.00	.00	-.38	.38	.99	.13	.04	-.22	.48	.46
Military	.23	.07	-.10	.56	.18	.24	.09	-.05	.53	.11

Study 1: $N = 472$. Adjusted $R^2 = .02$, $F(12, 459) = 1.78$, $p = .046$. Sub-scales of the Wilson-Patterson issues index (modified from Dodd et al., 2012), summarized by first principal component; see SOM for details.

Study 2: $N = 476$. Adjusted $R^2 = .04$, $F(14, 461) = 2.24$, $p = .006$. Sub-scales of the Wilson-Patterson issues index (modified from Dodd et al., 2012), summarized by first principal component; see SOM for details.

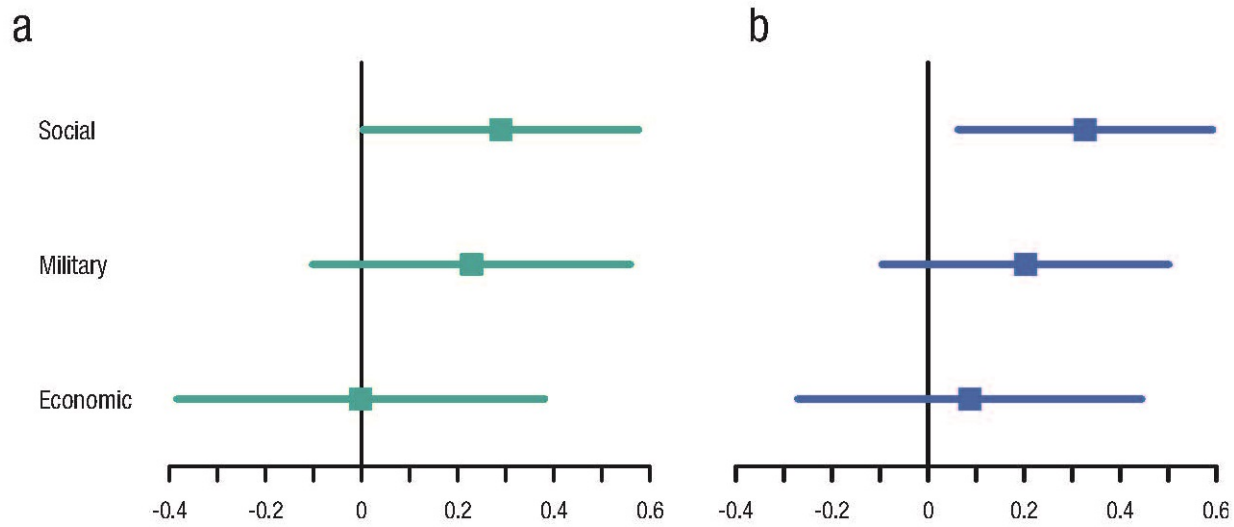

Fig. 1. Unstandardized parameter estimates with 95% confidence intervals for social, military, and fiscal conservatism for (a) Study 1 and (b) Study 2.

Discussion

Study 1 documented the predicted association between political orientation and negatively-biased credulity. However, likely reflecting shortcomings of MechanicalTurk, the sample suffered nontrivial data loss, and was not balanced as regards political orientation, being skewed left. We therefore conducted a second study, recruiting participants via Prolific Academic, an arguably superior online platform (Peer, Samat, Brandimarte, & Acquisti, 2015). Study 2 also improved on Study 1 by replacing outdated military items ("Patriot Act", "Iraq war") with contemporary topics (e.g., "Drone strikes," "Bomb cities controlled by terrorists"). To rule out the possibility that the pattern documented in Study 1 derives from differences in general reasoning abilities (Kemmelmeier, 2008), we added short measures of problem-solving and abstract reasoning (see SOM).

Study 2 Methods

Participants

In Study 2, in early September of 2016, 738 U.S. participants were recruited via Prolific Academic in exchange for $2.31. Data were pre-screened for completeness, repeat participation, taking at least 10 minutes to complete the study (the cutoff was extended from Study 1 due to the addition of time-consuming measures of reasoning and problem-solving), speaking English as a first language, and correctly answering "catch questions" (descriptive statistics in Table S2b; predictors of exclusion reported in Table S3). As the sample evinced a left-skewed political orientation, we randomly excluded participants who self-identified as more liberal (i.e., a 2 or lower) on the 9-point political orientation scale until our sample approximated the distribution of political orientations in the U.S. as documented in a Gallup poll conducted a few months prior to

our study (Jones & Saad, 2016). Results are robust to the exclusion or inclusion of these individuals (see Table S11). The final sample consisted of 476 adults (40% female; 79% White) ranging in age from 18 to 73 (M = 34.32, SD = 12.56).

Materials and Procedures

Participants were presented with the same credulity scales described in Study 1. Statements were presented in truly random order. Political orientation was assessed using the four measures described in Study 1, with some minor modifications. As noted above, items concerning U.S. military policy in Dodd et al.'s (2012) version of a Wilson and Patterson (1968) issues index were updated (see SOM). With two exceptions (see SOM Appendix 1), responses to all topics were summed; the scale had a high degree of internal consistency (α = .82). Dodd et al.'s social principles index (minus one item concerning danger – see SOM) again had high internal consistency (α = .74). This was followed by demographic items and measures of general reasoning ability (see SOM for complete survey). Many participants failed to indicate whether they were parents, so parenthood status is excluded from all models unless otherwise stated.

Study 2 Results

Because our four measures of political orientation had disparate ranges, we z-scored each measure, performed a principal components analysis, and extracted the first component (summarizing 73.90% of the variance, each having a loading of .77 or higher) as a summary of political orientation, where higher values indicate greater conservatism. (An alternative variable created by summing the four measures together produced similar results when included in our models – see SOM Table S6.)

Linear models were fit with the difference between weighted hazard credulity and weighted benefit credulity as the response. Variables that exhibited skewness were rounded down to the 97.5th percentile if negatively skewed (see SOM Appendix 2). No models exhibited collinearity.

Participants found weighted credulity-scale items significantly more believable if they concerned a hazard rather than a benefit (M_{hazard} = 12.82, $M_{benefit}$ = 11.48, t = 4.03, p < .001). A participant's average credulity toward benefits was correlated with the participant's average credulity toward hazards, r = .48.

Addressing the key prediction at issue, participants who were more conservative were again significantly more likely to exhibit greater credulity for information about hazards relative to information about benefits (Table 1), an effect independent of the effects of controls (Table S4); the same is true of the entire sample (i.e., when no highly liberal individuals are excluded) – see Table S11. One item (concerning terrorism) had a large influence on hazard credulity. Although exclusion of this item diminished the magnitude of the effect below significance, the effect consistently remained in the same direction across multiple iterations of the model, varying only slightly as a function of the set of liberals excluded (see Figure S1b). Treating hazard credulity separately from benefit credulity corroborates the predicted relationship: conservatism has a positive effect on hazard credulity, but no effect on benefit credulity (Tables S6a-b; see Figure S2b for the varied effect of excluding the terrorism item); this is true even if we do not weight credulity by the participant's perceived magnitude of the hazard or benefit described in each item (Table S8) or if we treat credulity for each item as a separate response (and include a random intercept for each participant and item; Tables S9a-b). As in Study 1, the relationship between conservatism and negatively-biased credulity was driven predominantly by

participants' responses to the Wilson-Patterson issues index (Table 2b). Also as in Study 1, items from this index addressing social conservatism predicted negatively-biased credulity, and, once again, the effect of conservative views on the military, obedience to authority, and punishment, was in the same direction though not significant, while fiscal conservatism again made no notable contribution in this regard (Table 3; Figure 1b; see SOM Appendix 1 for the Wilson-Patterson issues index items by category).

General Discussion

Because liberals and conservatives differ in responsiveness to negative information, particularly concerning threats, and similarly differ in how dangerous they perceive the world to be, we predicted, and found, that political orientation correlates with the tendency to believe information about hazards relative to the tendency to believe information about benefits, with liberals displaying less of this propensity and conservatives displaying more of it. This effect was driven by political orientation as defined by views on social issues. These results contribute to a corpus suggesting that, due to the intersection of variance in environments and variance in individual capabilities, a variety of potentially viable strategies emerge, with some individuals being more sensitive to the possibility of threats, and, correspondingly, paying higher precautionary costs, and others being less sensitive to this possibility, and paying higher costs when hazards are encountered.

While the predicted relationships are evident in our results, these findings should be considered preliminary given that ours were not representative nationwide samples, and our credulity measure consists of a small number of items. Indeed, its limited scope likely explains why, although in Study 2 our novel measure produced the previously documented overarching

pattern of negatively-biased credulity, in Study 1 this pattern was nonsignificant, albeit in the predicted direction. The same limitation may account for the outsized influence of one item on the key results of Study 2.

Because older individuals display less negativity bias than younger individuals (Reed, Chan, & Mikels, 2014), yet are generally more conservative (Cornelis, Van Hiel, Roets, & Kossowska, 2009), some have questioned the relationship between negativity bias and conservatism (Sedek, Kossowska, & Rydzewska, 2014). While our data do not resolve this, examining wide age ranges, we find no interaction between political orientation and age in predicting negatively-biased credulity (SOM Table S13; Figure S2). Rather, we find an effect of political orientation even when age is controlled for (Tables 1-3, Table S4), suggesting independent effects.

Social conservatism, but not fiscal conservatism, predicts increased negatively-biased credulity. Whereas fiscal conservatism is orthogonal to individuals' exposure to hazards, adherence to what are seen as tried-and-true rules for social organization and personal comportment – the foundations of social conservatism – is, for its proponents, a defense against disorder and danger; correspondingly, social conservatism correlates with threat-relevant personality features differentiating liberals and conservatives, but fiscal conservatism does not (Carney, Jost, Gosling, & Potter, 2008). Although in our models negatively-biased credulity is not predicted by conservative views on the military, obedience to authority, and endorsement of punishment (all of which concern avenues for enhancing stability and safety), consonant with the above reasoning, the magnitude of the association between this characteristic and negatively-biased credulity does not differ greatly from that of social conservatism (see Figure 1). Future work should therefore further examine the impact of this attribute on negatively-biased credulity.

The difference in negatively-biased credulity that we document likely interdigitates with related phenomena. Consonant with negatively-biased credulity, people judge those providing information about hazards as more competent than those providing other information (Boyer & Parren, 2015); our findings suggest that conservatives will display this pattern more than liberals. A parallel bias exists in information transmission, as people are more likely to transmit messages concerning hazards than messages concerning benefits (Altshteyn, 2014; Bebbington, MacLeod, Ellison, & Fay, in press; but see Stubbersfield, Tehrani, & Flynn, 2015). Political orientation likely shapes this bias also, potentially influencing the speed and breadth of dissemination of messages as a function of the political composition of a social network. A variety of phenomena thus link to negatively-biased credulity in a manner suggesting that politicians' alarmist claims will differentially impact liberals and conservatives.

In the 2016 U.S. election, President-elect Donald Trump enjoyed support from social conservatives despite being a recent convert to their positions; displaying limited familiarity with their scriptures; and having boasted of violating one of their commandments. While this support may have largely derived from, for example, Mr. Trump's opposition to abortion, the relationship between political orientation and negatively-biased credulity suggests that social conservatives may also have been influenced by his alarmist rhetoric, finding plausible such readily falsifiable claims as his August 29, 2016 tweet that "Inner-city crime is reaching record levels". Similarly, while it is difficult to gauge the effect of fake news on the election, the credence given by social conservatives to bogus reports of nefarious conspiracies apparently explains why profit-minded purveyors of fake news disproportionately targeted conservative audiences (Sydell, 2016). More broadly, although distinguishing between Chicken Little and Cassandra is frequently difficult – with grave perils attending mistakes on both sides – it seems

that social conservatives may be more apt to follow the former into the fox's den than they are to disregard the latter and witness the fall of Troy.

Author Contributions: D.M.T. Fessler and C. Holbrook conceived of the study. D.M.T. Fessler developed the methods with input from A.C. Pisor and C. Holbrook. C. Holbrook oversaw data collection. A.C. Pisor conducted all analyses, with input from C. Holbrook and D.M.T. Fessler. D.M.T. Fessler drafted the manuscript with critical revisions from A.C. Pisor and C. Holbrook. All authors approved the final version of the manuscript for submission.

Acknowledgments

We thank Scott Lilienfeld, John Hibbing, and Eddie Harmon-Jones for helpful feedback. C. Holbrook was supported by the U.S. Air Force Office of Scientific Research under Award #FA9550-115-1-0469.

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Supplementary Online Materials

to accompany

Political Orientation Predicts Credulity Regarding Putative Hazards

Daniel M.T. Fessler, Anne C. Pisor, and Colin Holbrook

The complete dataset, list of variables, and analytic code employed in this project are archived at osf.io/qqq82 and http://escholarship.org/uc/item/82j5p9r3

Table of contents

(Credulity Index)

(Each item was presented on a single web page, and the order of items was randomized)

Below are a series of statements collected from the media. Some of these statements are true, and some of them are false. For each of the statements, please indicate, by checking the appropriate box, how confident you are that the statement is true or false. Also, for each of the statements, please indicate how significant you think the things described in the statement are. Please note that your answers to each of these two questions should be independent of each other. For example, you might decide that you're absolutely certain that a statement is true, and select 7 for this question, but also feel that the risk described in the statement is small, and select 1 for this question.

1. Storing batteries in a refrigerator or freezer will improve their performance.

☐	☐	☐	☐	☐	☐	☐
1	2	3	4	5	6	7
I'm absolutely certain this statement is **FALSE**						I'm absolutely certain this statement is **TRUE**

☐	☐	☐	☐	☐	☐	☐
1	2	3	4	5	6	7
The benefit described in this statement is **SMALL**						The benefit described in this statement is **LARGE**

2. Cell phones damage credit card magnetic strips, making them unusable.

☐	☐	☐	☐	☐	☐	☐
1	2	3	4	5	6	7
I'm absolutely certain this statement is **FALSE**						I'm absolutely certain this statement is **TRUE**

☐	☐	☐	☐	☐	☐	☐
1	2	3	4	5	6	7
The risk described in this statement is **SMALL**						The risk described in this statement is **LARGE**

3. Eating carrots results in significantly improved vision.

☐	☐	☐	☐	☐	☐	☐
1	2	3	4	5	6	7
I'm absolutely certain this statement is **FALSE**						I'm absolutely certain this statement is **TRUE**

☐	☐	☐	☐	☐	☐	☐
1	2	3	4	5	6	7
The benefit described in this statement is **SMALL**						The benefit described in this statement is **LARGE**

4. Kale contains thallium, a toxic heavy metal, that the plant absorbs from soil.

☐	☐	☐	☐	☐	☐	☐
1	2	3	4	5	6	7

I'm absolutely certain this statement is **FALSE**

I'm absolutely certain this statement is **TRUE**

☐	☐	☐	☐	☐	☐	☐
1	2	3	4	5	6	7

The risk described in this statement is **SMALL**

The risk described in this statement is **LARGE**

---

5. Exercising on an empty stomach burns more calories.

☐	☐	☐	☐	☐	☐	☐
1	2	3	4	5	6	7

I'm absolutely certain this statement is **FALSE**

I'm absolutely certain this statement is **TRUE**

☐	☐	☐	☐	☐	☐	☐
1	2	3	4	5	6	7

The benefit described in this statement is **SMALL**

The benefit described in this statement is **LARGE**

---

6. Long-distance running causes osteoarthritis of the knees.

☐	☐	☐	☐	☐	☐	☐
1	2	3	4	5	6	7

I'm absolutely certain this statement is **FALSE**

I'm absolutely certain this statement is **TRUE**

☐	☐	☐	☐	☐	☐	☐
1	2	3	4	5	6	7

The risk described in this statement is **SMALL**

The risk described in this statement is **LARGE**

7. Selecting credit cards that have a low credit limit improves one's credit score.

☐	☐	☐	☐	☐	☐	☐
1	2	3	4	5	6	7

I'm absolutely certain this statement is **FALSE**

I'm absolutely certain this statement is **TRUE**

☐	☐	☐	☐	☐	☐	☐
1	2	3	4	5	6	7

The benefit described in this statement is **SMALL**

The benefit described in this statement is **LARGE**

8. Hotel room keycards are often encoded with personal information that can be read by thieves.

☐	☐	☐	☐	☐	☐	☐
1	2	3	4	5	6	7
I'm absolutely certain this statement is **FALSE**						I'm absolutely certain this statement is **TRUE**

☐	☐	☐	☐	☐	☐	☐
1	2	3	4	5	6	7
The risk described in this statement is **SMALL**						The risk described in this statement is **LARGE**

9. People who own cats live longer than people who don't.

☐	☐	☐	☐	☐	☐	☐
1	2	3	4	5	6	7
I'm absolutely certain this statement is **FALSE**						I'm absolutely certain this statement is **TRUE**

☐	☐	☐	☐	☐	☐	☐
1	2	3	4	5	6	7
The benefit described in this statement is **SMALL**						The benefit described in this statement is **LARGE**

10. Sharks pose a significant risk to beachgoers.

☐	☐	☐	☐	☐	☐	☐
1	2	3	4	5	6	7
I'm absolutely certain this statement is **FALSE**						I'm absolutely certain this statement is **TRUE**

☐	☐	☐	☐	☐	☐	☐
1	2	3	4	5	6	7
The risk described in this statement is **SMALL**						The risk described in this statement is **LARGE**

11. Stockwood, California is one of the safest cities in the U.S.

☐	☐	☐	☐	☐	☐	☐
1	2	3	4	5	6	7
I'm absolutely certain this statement is **FALSE**						I'm absolutely certain this statement is **TRUE**

☐	☐	☐	☐	☐	☐	☐
1	2	3	4	5	6	7
The benefit described in this statement is **SMALL**						The benefit described in this statement is **LARGE**

12. Terrorist attacks in the U.S. have increased since Sept 11, 2001.

☐	☐	☐	☐	☐	☐	☐
1	2	3	4	5	6	7
I'm absolutely certain this statement is **FALSE**						I'm absolutely certain this statement is **TRUE**

☐	☐	☐	☐	☐	☐	☐
1	2	3	4	5	6	7
The risk described in this statement is **SMALL**						The risk described in this statement is **LARGE**

13. When flying on major airlines, you are more likely to be upgraded from economy to business class if you ask at the gate.

☐	☐	☐	☐	☐	☐	☐
1	2	3	4	5	6	7
I'm absolutely certain this statement is **FALSE**						I'm absolutely certain this statement is **TRUE**

☐	☐	☐	☐	☐	☐	☐
1	2	3	4	5	6	7
The benefit described in this statement is **SMALL**						The benefit described in this statement is **LARGE**

14. An intoxicated passenger could partially open the exit door on a commercial jetliner, causing the cabin to depressurize and the oxygen masks to deploy.

☐	☐	☐	☐	☐	☐	☐
1	2	3	4	5	6	7
I'm absolutely certain this statement is **FALSE**						I'm absolutely certain this statement is **TRUE**

☐	☐	☐	☐	☐	☐	☐
1	2	3	4	5	6	7
The risk described in this statement is **SMALL**						The risk described in this statement is **LARGE**

15. In a thunderstorm, a hard-topped car can offer protection from lightning, as long as the occupants do not touch metal inside the car.

☐	☐	☐	☐	☐	☐	☐
1	2	3	4	5	6	7
I'm absolutely certain this statement is **FALSE**						I'm absolutely certain this statement is **TRUE**

☐	☐	☐	☐	☐	☐	☐
1	2	3	4	5	6	7
The benefit described in this statement is **SMALL**						The benefit described in this statement is **LARGE**

16. In the U.S., an average of 32 people are killed by lightning each year.

☐	☐	☐	☐	☐	☐	☐
1	2	3	4	5	6	7
I'm absolutely certain this statement is **FALSE**						I'm absolutely certain this statement is **TRUE**

☐	☐	☐	☐	☐	☐	☐
1	2	3	4	5	6	7
The risk described in this statement is **SMALL**						The risk described in this statement is **LARGE**

In the following sections, please tell us about yourself.

Your gender:

__ Female

__ Male

Your age: ___

How many letters are in the English alphabet? ___

(Study 1: Wilson-Patterson Issues Index – modified from Dodd et al. [2012])

Please indicate whether you agree or disagree, or are uncertain, with regard to each topic listed below:

1. school prayer: __ agree __disagree __uncertain
2. pacifism: __ agree __disagree __uncertain
3. socialism: __ agree __disagree __uncertain
4. pornography: __ agree __disagree __uncertain
5. illegal immigration: __ agree __disagree __uncertain
6. women's equality: __ agree __disagree __uncertain
7. death penalty: __ agree __disagree __uncertain
8. The Patriot Act: __ agree __disagree __uncertain
9. premarital sex: __ agree __disagree __uncertain
10. gay marriage: __ agree __disagree __uncertain
11. abortion rights: __ agree __disagree __uncertain
12. evolution: __ agree __disagree __uncertain
13. patriotism: __ agree __disagree __uncertain
14. Biblical truth: __ agree __disagree __uncertain
15. 2003 Iraq invasion[1]: __ agree __disagree __uncertain
16. welfare spending: __ agree __disagree __uncertain
17. tax cuts: __ agree __disagree __uncertain
18. gun control: __ agree __disagree __uncertain
19. military spending: __ agree __disagree __uncertain
20. warrantless searches: __ agree __disagree __uncertain
21. globalization: __ agree __disagree __uncertain
22. pollution control: __ agree __disagree __uncertain
23. small government: __ agree __disagree __uncertain
24. school standards: __ agree __disagree __uncertain
25. foreign aid: __ agree __disagree __uncertain
26. free trade: __ agree __disagree __uncertain
27. obedience to authorities[2]: __ agree __disagree __uncertain
28. compromise with enemies[3]: __ agree __disagree __uncertain
29. charter schools[4]: __ agree __disagree __uncertain

[1] *Modified from Dodd et al.'s original "Iraq"*

[2] *Modified from Dodd et al's original "obedience"*

[3] *Modified from Dodd et al.'s original "compromise"*

[4] *Replaces Dodd et al.'s original "school standards"*

(Study 2: Wilson-Patterson Issues Index – modified from Dodd et al. [2012])

Please indicate whether you agree or disagree, or are uncertain, with regard to each topic listed below:

1. school prayer: __ agree __disagree __uncertain
2. pacifism: __ agree __disagree __uncertain
3. socialism: __ agree __disagree __uncertain
4. pornography: __ agree __disagree __uncertain
5. illegal immigration: __ agree __disagree __uncertain
6. women's equality: __ agree __disagree __uncertain
7. death penalty: __ agree __disagree __uncertain
8. use nuclear weapons against threats to the U.S.[1]: __ agree __disagree __uncertain
9. premarital sex: __ agree __disagree __uncertain
10. gay marriage: __ agree __disagree __uncertain
11. abortion rights: __ agree __disagree __uncertain
12. evolution: __ agree __disagree __uncertain
13. patriotism: __ agree __disagree __uncertain
14. Biblical truth: __ agree __disagree __uncertain
15. bomb cities controlled by terrorists[1]: __ agree __disagree __uncertain
16. welfare spending: __ agree __disagree __uncertain
17. tax cuts: __ agree __disagree __uncertain
18. waterboarding terror suspects[2]: __ agree __disagree __uncertain
19. gun control: __ agree __disagree __uncertain
20. military spending: __ agree __disagree __uncertain
21. warrantless searches: __ agree __disagree __uncertain
22. globalization: __ agree __disagree __uncertain
23. pollution control: __ agree __disagree __uncertain
24. small government: __ agree __disagree __uncertain
25. charter schools[1]: __ agree __disagree __uncertain
26. foreign aid: __ agree __disagree __uncertain
27. free trade: __ agree __disagree __uncertain
28. drone strikes[2]: __ agree __disagree __uncertain
29. obedience to authorities[3]: __ agree __disagree __uncertain
30. compromise with enemies[4]: __ agree __disagree __uncertain

[1] *Modified from Dodd et al.'s original to increase relevance to contemporary politics*

[2] *Added to increase relevance to contemporary politics*

[3] *Modified from Dodd et al's original "obedience"*

[4] *Modified from Dodd et al.'s original "compromise"*

(Social Principles Index – slightly modified* from Dodd et al. [2012])

Please tell us your opinions regarding how society works best by selecting one of the two options in each of the following statements:

Society works best when...

1-People live according to traditional values

2-People adjust their values to fit changing circumstances

Society works best when...

1-Behavioral expectations are based on an external code

2-Behavioral expectations are allowed to evolve over the decades

Society works best when...

1-Our leaders stick to their beliefs regardless

2-Our leaders change positions whenever situations change

Society works best when...

1-We take care of our own people first

2-We realize that people everywhere deserve our help

Society works best when...

1-Those who break the rules are punished

2-Those who break the rules are forgiven

Society works best when...

1-Every member contributes

2-More fortunate members sacrifice to help others

Society works best when...

1-People are rewarded according to merit

2-People are rewarded according to need

Society works best when...

1-People take primary responsibility for their welfare

2-People join together to help others

Society works best when...

1-People are proud they belong to the best society there is

2-People realize that no society is better than any other

Society works best when...

1-Our leaders are obeyed

2-Our leaders are questioned

Society works best when...

1-Our leaders call the shots

2-Our leaders are forced to listen to others

Society works best when...

1-People recognize the unavoidable flaws of human nature

2-People recognize that humans can be changed in positive ways

Society works best when...

1-Our leaders compromise with their opponents in order to get things done

2-Our leaders adhere to their principles no matter what

** Because it directly addresses belief in a dangerous world, the following item from Dodd et al.'s original measure was omitted from the survey:*

Society works best when...

1-People realize the world is dangerous

2-People assume all those in faraway places are kindly

How would you rate your overall political orientation?

o	o	o	o	o	o	o	o	o
Extremely Liberal				Moderate				Extremely Conservative

Please select the term that best describes your political affiliation:

__Republican

__Democratic

__Tea Party

__Libertarian

__Green

__Other (please indicate) _____

__None / not affiliated with any political party

Do you consider yourself an American?

- Yes
- Somewhat
- No

Is English your first language?

- Yes
- No

Your ethnicity:

- African-American
- Asian
- Hispanic / Latin American
- Middle Eastern
- Pacific Islander
- South Asian / Indian
- White
- More than one
- Other

Annual household income:

- under $20,000
- $20 - $30,000
- $30 - $40,000
- $40 - $50,000
- $50 - $60,000
- $60 - $70,000
- $70 - $80,000
- $80 - $90,000
- $90 - $100,000
- $100 - $110,000
- $110 - $120,000
- $120 - $130,000
- $130 - $140,000
- $140 - $150,000
- $150 - $160,000
- $170 - $180,000
- $180 - $190,000
- $190 - $200,000
- $200 - $210,000
- $210 - $220,000
- $220 - $230,000
- $230 - $240,000
- $240 - $250,000
- $250 - $260,000
- $260 - $270,000
- $270 - $280,000
- $280 - $290,000
- $290 - $300,000
- over $300,000

Education:

- Middle school or less
- Some High School
- High School Graduate
- Some college
- AA degree
- College graduate
- Some graduate school
- Master's degree
- Advanced degree (e.g., Ph.D.)

How many letters are in the word "obligatory”? _____

What is your height, to the nearest half-inch?

Feet: _____ Inches: _____

(Study 1) How surprised would you be to see someone eat lunch in the afternoon?

o	o	o	o	o	o	o	o	o
Not surprised at all								Extremely surprised

Are you a parent?

- Yes
- No

(Study 1: Yes →) **Please answer the following questions about your family.**

(Study 1) Are you currently raising a baby in your home?

- Yes
- No

(Study 1) How many girls have you had? _____

(Study 1) How many boys have you had? _____

(Study 1) How many girls have you personally raised? _____

(Study 1) How many boys have you personally raised? _____

(Study 1) How old were you when had your first child? _____

(Study 1) How old is your YOUNGEST child, in years? (If an infant, please specify that you are answering in months, e.g., "8 months"): _____

(Study 1) What is the gender of your YOUNGEST child? _____

(Study 1) How old is your OLDEST child, in years? _____

(Study 1) If you have only had one child, please type "NA": What is the gender of your OLDEST child? _____

Appendix 1. Categories of conservatism based on a modified version of Dodd et al.'s (2012) Wilson-Patterson issues index.

For Study 1, we sorted 25 of 28 items from the modified Wilson-Patterson issues index into three types of conservatism:

Social conservatism: school prayer, pornography, illegal immigration, women's equality, premarital sex, gay marriage, abortion rights, evolution, biblical truth, gun control

Economic conservatism: socialism, welfare spending, tax cuts, globalization, pollution control, small government, foreign aid

Military, obedience, and punishment conservatism: pacifism, death penalty, Patriot Act, patriotism, the 2003 Iraq invasion, military spending, obedience, compromise

We omitted items concerning free trade and charter schools (our modification to the school standards item), as neither discriminated between liberals and conservatives. An item concerning warrantless search was also omitted as it did not load onto any of the three categories described above.

For Study 2, we removed the Iraq invasion question as its continuing relevance is questionable, but added other items intended to gauge international military involvement. We sorted 26 of 30 items from the modified Wilson-Patterson issues index into three types of conservatism:

Social conservatism: school prayer, pornography, illegal immigration, women's equality, premarital sex, gay marriage, abortion rights, evolution, biblical truth, gun control

Fiscal conservatism: socialism, welfare spending, tax cuts, globalization, pollution control, small government, foreign aid

Military, obedience, and punishment conservatism: pacifism, death penalty, Patriot Act, patriotism, military spending, obedience, compromise, use nuclear weapons against threats to the U.S., bomb cities controlled by terrorists, waterboarding terror suspects, drone strikes

We omitted items concerning free trade and globalization, as neither discriminated between liberals and conservatives.

We summarized each of the three above categories using principal components analysis. For Study 1, the social conservatism principal component summarized 43.68% of the variance with variable loadings between .39-.80, the economic conservatism principal component summarized 33.42% of the variance with variable loadings between .40-.72, and the military/obedience/punishment conservatism principal component summarized 35.63% of the variance with variable loadings between .45-.68. For Study 2, the social conservatism principal component summarized 45.55% of the variance with variable loadings between .28-.82, the economic conservatism principal component summarized 35.82% of the variance with variable loadings between .41-.71, and the military/obedience/punishment conservatism principal component summarized 37.34% of the variance with variable loadings between .45-.72.

Appendix 2. Addressing outliers

When exploratory data analysis revealed outliers, these points were rounded up or down to lower their influence on model fit. In Study 1, extreme positive values for participant age, income, education, social conservatism, and the Wilson-Patterson issues index were rounded down to the 97.5th percentile (i.e., ages rounded to 65, income rounded to the 15th increment ($160,000), advanced degrees lumped with some advanced degree study, social conservatism rounded to 5, and Wilson-Patterson rounded to 17). Very low values for education, i.e., five individuals who had not completed high school, were lumped with high school graduates. Likewise, in Study 2, 3 individuals who had not completed high school were lumped with high school graduates, and 7 individuals with a doctoral degree were lumped with master's degree recipients. We also rounded down participants with the highest incomes to the 97.5th percentile (income increment 18, or incomes larger than $200,000 annually) and rounded up participants with the lowest Raven's matrices and Wonderlic scores to the 2.5th percentile (-2.23 and -1.90 standard deviations, respectively).

Appendix 3. Imputation, random seeds, and random culling in Study 2

Missing values were imputed for participants who failed to respond to less than 10% of the credulity items, less than 10% of the issues items, and less than 10% of the social principles index; values were also imputed for participants who failed to provide their political orientation (Study 1 $n = 3$, Study 2 $n = 0$), political category (Study 1 $n = 3$, Study 2 $n = 6$), income (Study 1 $n = 1$, Study 2 $n = 5$), or education (Study 1 $n = 7$, Study 1 $n = 1$). Imputation was performed via predictive mean matching (Van Buuren and Groothuis-Oudshoorn, 2011): in this approach, given all participants' responses, the function generates a mean prediction for one participant's missing value (Little, 1988). Imputation was performed five times for each missing value and the mean of these five imputations kept as the final value. Participants with imputed values are included in all models except in the model reported in Table S5. Predictive mean matching relies on a random number generator. We initialize the generator with five different seed values. Results reported were generated using the third seed. In Study 2, we randomly eliminate participants to achieve a sample that is approximately nationally representative in terms of social political orientation (Jones and Saad, 2016). We perform this process five times, and note where results were altered by the sample selected.

Table S1a. Study 1: descriptive statistics.

Variable	*Mean*	*SD*	*Median*	*Min*	*Max*	*N*	% level 1	% level 2	% level 3	% level 4	% level 5	Notes
Credulity difference	.28	5.34	.13	-17.38	15.63	449						Weighted avg. hazards - weighted avg. benefits
Wtd. avg. hazard credulity	12.30	5.07	11.69	1.00	29.63	456						Weighted by centrists' perceived hazardousness
Wtd. avg. benefit credulity	11.98	4.63	11.50	1.75	27.63	463						Weighted by centrists' perceived beneficialness
Cred. difference (unweighted)	-.19	.85	-.25	-2.88	2.38	459						Avg. hazards - avg. benefits
Political summary	.00	1.70	-.31	-2.87	4.51	472						Principal component of the four politics measures
Pol. summary (Non-PCA)	.01	3.43	-.69	-5.64	8.89	444						Summary of the four politics measures
"Society works best"	-3.45	5.46	-3.00	-13.00	13.00	466						Positive values more conservative
Political Likert	3.99	2.20	4.00	1.00	9.00	471						1 = extremely liberal 9 = extremely conservative
Political category	NA	NA	.00	NA	NA	469	.49	.32	.19			1=liberal party 2=libertarian or unaffiliated 3=conservative party
Wilson-Patterson index	-5.21	9.80	-6.00	-25.00	16.68	454						Positive values more conservative
Social conservatism	-.01	2.06	-.70	-2.20	5.03	472						Principal component of sub-measure of Wilson-Patterson index
Fiscal	.00	1.53	-.04	-2.85	3.89	472						Principal component of

											Patterson index
Military conservatism	.00	1.69	.00	-3.51	3.51	472					Principal component of sub-measure of Wilson-Patterson index
Age	17.03	11.81	14.00	.00	46.00	472					Given in years
Income	3.78	3.57	3.00	.00	14.00	471					
Sex	NA	NA	2.00	NA	NA	472	.48	.52			1=female, 2=male
Ethnicity	NA	NA	2.00	NA	NA	472	.19	.81			1=other, 2=white
Education	NA	NA	4.00	NA	NA	465	.15	.09	.36	.26	.14	1=high school, 2=some college, 3=associate's, 4=bachelor's, 5=at least some advanced degree
Parenthood	NA	NA	1.00	NA	NA	472	.61	.39				1=no, 2=yes. 3=no reply

Note. Imputed values are not reported here.

Table S1b. Study 2: descriptive statistics for subsample excluding randomly omitted liberals.

Variable	*Mean*	*SD*	*Median*	*Min*	*Max*	*N*	% level 1	% level 2	% level 3	% level 4	% level 5	% level 6	Notes
Credulity difference	1.24	4.96	1.13	-12.88	22.13	451							Weighted avg. hazards - weighted avg. benefits
Wtd. avg. hazard credulity	12.67	5.21	12.25	1.88	34.63	461							Weighted by centrists' perceived hazardousness
Wtd. avg. benefit credulity	11.46	4.59	11.00	1.63	33.00	466							Weighted by centrists' perceived beneficialness
Cred. difference (unweighted)	-.02	.82	.00	-2.25	3.88	465							Avg. hazards - avg. benefits
Political Summary	.00	1.73	-.16	-3.57	3.97	476							Principal component of the four politics measures
Pol. summary (Non-PCA)	.02	3.48	-.24	-7.02	7.81	450							Summary of the four politics measures
"Society works best"	-2.00	5.86	-3.00	-13.00	13.00	467							Positive values more conservative
Political Likert	4.98	2.14	5.00	1.00	9.00	476							1 = extremely liberal 9 = extremely conservative
Political category	NA	NA	.00	NA	NA	470	.36	.36	.29				1=liberal party 2=libertarian or unaffiliated 3=conservative party
Wilson-Patterson index	-2.93	10.47	-4.00	-25.00	22.00	463							Positive values more conservative
Social conservatism	.00	2.14	-.92	-2.28	5.45	476							Principal component of sub-measure of Wilson-Patterson index
Fiscal conservatism	.00	1.60	.01	-3.52	3.35	476							Principal component of sub-measure of Wilson-Patterson index
Military conservatism	.00	1.82	-.02	-4.05	3.38	476							Principal component of sub-measure of Wilson-

													Patterson index
Raven's test	.02	.96	.16	-2.13	1.31	469							Correct - incorrect
Wonderlic test	.01	.98	.08	-2.00	1.50	464							Correct - incorrect
Age	34.32	12.47	31.00	18.00	73.00	476							Given in years
Income	4.60	4.07	4.00	.00	17.00	471							
Sex	NA	NA	2.00	NA	NA	476	.40	.60					1=female, 2=male
Ethnicity	NA	NA	2.00	NA	NA	476	.21	.79					1=other, 2=white
Education	NA	NA	4.00	NA	NA	475	.10	.28	.08	.35	.04	.14	1=high school, 2=some college, 3=associate's, 4=bachelor's, 5=at least some advanced degree. 6 = advanced degree
Parenthood	NA	NA	1.00	NA	NA	380	.59	.41					1=no, 2=yes. 3=no reply

Note. Imputed values are not reported here.

Table S2a. Study 1: descriptive statistics for participants excluded from analyses.

Variable	*Mean*	*SD*	*Median*	*Min*	*Max*	*N*	%	%	%	%	%	Notes

							level 1	level 2	level 3	level 4	level 5	
Credulity difference	-.46	4.23	-1.38	-9.00	8.25	37						Weighted avg. hazards - weighted avg. benefits
Wtd. avg. hazard credulity	11.71	4.55	12.44	3.75	21.00	38						Weighted by centrists' perceived hazardousness
Wtd. avg. benefit credulity	12.01	4.03	12.00	1.50	19.25	42						Weighted by centrists' perceived beneficialness
Cred. difference (unweighted)	-.28	.71	-.25	-1.88	1.00	37						Avg. hazards - avg. benefits
Political PCA	.02	1.01	.00	-2.84	3.27	65						Principal component of the following four measures
Pol. summary (Non-PCA)	-.04	2.59	.35	-5.45	5.47	30						Summary of the four politics measures
"Society works best"	-3.87	4.75	-3.00	-13.00	7.00	30						Positive values more conservative
Political Likert	3.94	1.85	4.00	1.00	8.00	32						1 = extremely liberal 9 = extremely conservative
Political category	NA	NA	.00	NA	NA	32	.28	.50	.22			1=liberal party 0=libertarian or unaffiliated 3=conservative party
Wilson-Patterson index	-6.20	7.95	-7.50	-19.00	16.78	36						Positive values more conservative
Social conservatism	-.01	1.49	.00	-2.26	5.18	65						Principal component of sub-measure of Wilson-Patterson index
Fiscal conservatism	-.05	1.19	.00	-2.90	4.09	65						Principal component of sub-measure of Wilson-Patterson index
Military conservatism	-.18	1.15	.00	-2.31	2.87	65						Principal component of sub-measure of Wilson-Patterson index

Age	32.32	10.42	12.00	19.00	64.00	37					Given in years
Income	3.86	4.10	2.00	.00	14.00	29					
Sex	NA	NA	2.00	NA	NA	37	.43	.57			1=female, 2=male
Ethnicity	NA	NA	2.00	NA	NA	32	.44	.56			1=other, 2=white
Education	NA	NA	4.00	NA	NA	30	.13	.37	.03	.37	.10	1=high school, 2=some college, 3=associate's, 4=bachelor's, 5=at least some advanced degree
Parenthood	NA	NA	1.00	NA	NA	33	.70	.30				1=no 2=yes 3=no reply

Note. Imputed values are not reported here.

Table S2b. Study 2: descriptive statistics for participants excluded from analysis (prior to exclusion of liberals or centrists).

Variable	*Mean*	*SD*	*Median*	*Min*	*Max*	*N*	% level 1	% level 2	% level 3	% level 4	% level 5	% level 6	Notes
Credulity difference	.75	5.36	0.63	-11.13	15.38	53							Weighted avg. hazards - weighted avg. benefits
Wtd. avg. hazard credulity	12.84	4.94	12.63	5.00	30.00	53							Weighted by centrists' perceived hazardousness
Wtd. avg. benefit credulity	11.92	4.69	11.81	3.63	23.63	58							Weighted by centrists' perceived beneficialness
Cred. difference (unweighted)	-.02	.91	-.13	-2.00	2.25	56							Avg. hazards - avg. benefits
Political PCA	-.05	1.61	-.41	-3.19	3.69	58							Principal component of the following four measures
Pol. summary (Non-PCA)	-.15	3.26	-.86	-6.25	7.27	47							Summary of the four politics measures
"Society works best"	-1.69	5.54	-1.00	-13.00	13.00	52							Positive values more conservative
Political Likert	4.86	2.26	5.00	1.00	9.00	58							1 = extremely liberal 9 = extremely conservative
Political category	NA	NA	.00	NA	NA	57	.40	.28	.32				1=liberal party 0=libertarian or unaffiliated 3=conservative party
Wilson-Patterson index	-3.06	9.01	-4.00	-24.00	17.00	52							Positive values more conservative
Social conservatism	.13	2.02	-.69	-2.29	4.22	58							Principal component of sub-measure of Wilson-Patterson index
Fiscal conservatism	-.13	1.43	-.06	-3.50	3.30	58							Principal component of sub-measure of Wilson-Patterson index
Military conservatism	-.06	1.78	-.04	-3.44	3.33	58							Principal component of sub-measure of Wilson-

													Patterson index
Raven's test	-.45	1.01	-.12	-2.27	1.31	53							Correct - incorrect
Wonderlic test	-.47	.98	-.35	-2.19	1.49	47							Correct - incorrect
Age	32.17	10.97	12.00	18.00	56.00	58							Given in years
Income	4.71	4.04	4.00	65.00	15.00	55							
Sex	NA	NA	2.00	NA	NA	58	.38	.62					1=female, 2=male
Ethnicity	NA	NA	2.00	NA	NA	57	.26	.74					1=other, 2=white
Education	NA	NA	4.00	NA	NA	55	.18	.35	.04	.29	.04	.11	1=high school, 2=some college, 3=associate's, 4=bachelor's, 5=at least some advanced degree. 6 = advanced degree
Parenthood	NA	NA	1.00	NA	NA	63	.52	.48					1=no 2=yes 3=no reply

Note. Imputed values are not reported here.

Table S3. Parameter estimates, 95% confidence intervals, and *p* values for logistic model exploring predictors of being excluded for incomplete responses, not speaking English as a first language, repeat participation, and not answering catch questions.

	Study 1				*Study 2*			
Variable	*Parm. Est.*	*5% CI*	*95% CI*	*p*	*Parm. Est.*	*5% CI*	*95% CI*	*p*
(Intercept)	-1.78	-3.19	-.37	.01	-2.72	-4.03	-1.41	.00
Political summary	.10	-.14	.34	.42	-.09	-.31	.14	.45
Sex: Male	.27	-.53	1.08	.51	.61	-.14	1.37	.11
Age	-.04	-.09	.00	.08	.02	-.02	.05	.33
Ethnicity: White[1]	-.99	-1.80	-.18	.02	-.76	-1.52	-.01	.05
Income	.01	-.10	.13	.81	.03	-.06	.13	.49
Educ: Associate's	-1.01	-3.27	1.26	.38	-1.56	-3.82	.70	.18
Educ: Bachelor's	.02	-1.23	1.28	.97	-.22	-1.58	1.14	.75
Educ: Some associate's	.31	-.91	1.52	.62	-.05	-1.12	1.02	.93
Educ: Some adv. grad	-.04	-1.67	1.59	.96	.15	-.90	1.21	.77
Parenthood	.15	-.78	1.09	.75	-.42	-2.69	1.85	.72
Raven's test	---	---	---	---	-.38	-.76	.01	.06
Wonderlic test	---	---	---	---	-.46	-.87	-.04	.03

Study 1: $N = 428$. Study 2: $N = 487$. Effect not robust across iterations.

Table S4. Parameter estimates, 95% confidence intervals, and *p* values for models with political summary measure as a predictor, weighted hazard credulity minus weighted benefit credulity as the outcome, full model.

	Study 1				*Study 2*			
Variable	*Parm. Est.*	*5% CI*	*95% CI*	*p*	*Parm. Est.*	*5% CI*	*95% CI*	*p*
(Intercept)	-.27	-2.09	1.54	.77	.63	-1.25	2.52	.51
Political summary	.36	.08	.65	.01	.54	.28	.81	.00
Sex: Male	-.57	-1.53	.39	.24	.52	-.43	1.46	.29
Age	.00	-.05	.04	.98	.03	-.01	.07	.16
Ethnicity: White	-.05	-1.28	1.17	.93	-.32	-1.44	.79	.57
Income	.04	-.11	.18	.63	-.01	-.12	.10	.87
Educ: Advanced degree	---	---	---	---	-.49	-2.37	1.39	.61
Educ: Associate's	.38	-1.60	2.36	.71	.14	-1.98	2.26	.90
Educ: Bachelor's	.18	-1.29	1.65	.81	.38	-1.22	1.98	.64
Educ: Some associate's	1.23	-.31	2.77	.12	.28	-1.34	1.89	.74
Educ: Some adv. grad	.99	-.85	2.82	.29	.12	-2.42	1.89	.74
Raven's test	---	---	---	---	-.05	-.59	.49	.86
Wonderlic test	---	---	---	---	-.15	-.70	.41	.61
Parenthood	.67	-.46	1.80	.25	---	---	---	---

Study 1: $N = 472$. Adjusted $R^2 = .01$, $F(10, 461) = 1.66$, $p = .09$. Women, "other" ethnicity, some high school/high school diploma, and non-parents are held at zero. Age is centered such that the intercept represents age 19.

Study 2: $N = 476$. Adjusted $R^2 = .03$, $F(12, 463) = 2.09$, $p = .02$. Women, "other" ethnicity, some high school/high school diploma. Age is centered such that the intercept represents age 18. Parenthood status excluded for Study 2 due to large number of incompletes.

Table S5. Parameter estimates, 95% confidence intervals, and *p* values for models with political summary measure as a predictor, weighted hazard credulity minus weighted benefit credulity as the outcome, full model with no imputation.

	Study 1				*Study 2*			
Variable	*Parm. Est.*	*5% CI*	*95% CI*	*p*	*Parm. Est.*	*5% CI*	*95% CI*	*p*
(Intercept)	-.63	-2.57	1.31	.53	1.05	-.99	3.08	.31
Political summary	.37	.07	.67	.01	.58	.30	.86	.00
Sex: Male	-.52	-1.53	.50	.32	.52	-.49	1.52	.32
Age	-.01	-.05	.04	.83	.03	-.01	.07	.17
Ethnicity: White	.22	-1.09	1.52	.75	-.23	-1.44	.98	.71
Income	.04	-.11	.19	.64	-.01	-.14	.11	.82
Educ: Advanced degree	---	---	---	---	-.81	-2.81	1.18	.42
Educ: Associate's	.59	-1.51	2.69	.58	-.06	-2.36	2.25	.96
Educ: Bachelor's	.35	-1.23	1.94	.66	-.17	-1.87	1.52	.84
Educ: Some associate's	1.33	-.31	2.97	.11	-.21	-1.91	1.49	.81
Educ: Some adv. grad	1.03	-.94	2.99	.31	-.64	-3.28	2.01	.64
Raven's test	---	---	---	---	-.20	-.78	.38	.51
Wonderlic test	---	---	---	---	-.18	-.77	.41	.54
Parenthood	.83	-.35	2.02	.17	---	---	---	---

Study 1: $N = 441$. Adjusted $R^2 = .01$, $F(10, 430) = 1.63$, $p = .09$. Women, "other" ethnicity, some high school/high school diploma, and non-parents are held at zero. Age is centered such that the intercept represents age 19.

Study 2: $N = 432$. Adjusted $R^2 = .03$, $F(12, 419) = 2.19$, $p = .011$. Women, "other" ethnicity, some high school/high school diploma, and non-parents are held at zero. Age is centered such that the intercept represents age 18. Parenthood status excluded for Study 2 due to large number of incompletes.

Table S6a. Parameter estimates, 95% confidence intervals, and *p* values for models with political summary measure as a predictor, weighted hazard credulity as the outcome.

	Study 1				*Study 2*			
Variable	*Parm. Est.*	*5% CI*	*95% CI*	*p*	*Parm. Est.*	*5% CI*	*95% CI*	*p*
(Intercept)	13.72	12.03	15.41	.00	12.74	10.87	14.60	.00
Political summary	.48	.22	.75	.00	.59	.33	.85	.00
Sex: Male	-1.74	-2.63	-.85	.00	-.18	-1.12	.75	.70
Age	.02	-.02	.06	.40	.07	.03	.11	.00
Ethnicity: White	-.88	-2.02	.26	.13	-.59	-1.70	.52	.30
Income	-.13	-.26	.00	.05	-.06	-.17	.05	.27
Educ: Advanced degree	---	---	---	---	-.48	-2.35	1.39	.61
Educ: Associate's	-.13	-1.97	1.71	.89	.25	-1.86	2.35	.82
Educ: Bachelor's	-.16	-1.52	1.21	.82	-.36	-1.94	1.23	.66
Educ: Some associate's	.73	-.71	2.16	.32	-.38	-1.98	1.22	.64
Educ: Some adv. grad	-.39	-2.09	1.31	.66	.13	-2.39	2.66	.92
Parenthood	.77	-.28	1.82	.15	---	---	---	---
Raven's test	---	---	---	---	-.17	-.71	.36	.53
Wonderlic test	---	---	---	---	-.97	-1.52	-.42	.00

Study 1: $N = 472$. Adjusted $R^2 = .03$, $F(10, 461) = 2.52$, $p = .006$. Women, "other" ethnicity, some high school/high school diploma, and non-parents are held at zero. Age is centered such that the intercept represents age 19.

Study 2: $N = 476$. Adjusted $R^2 = .12$, $F(12, 463) = 6.61$, $p < .001$. Women, "other" ethnicity, some high school/high school diploma, and non-parents are held at zero. Age is centered such that the intercept represents age 18. Parenthood status excluded for Study 2 due to large number of incompletes.

Table S6b. Parameter estimates, 95% confidence intervals, and *p* values for models with political summary measure as a predictor, weighted benefit credulity as the outcome.

	Study 1				*Study 2*			
Variable	*Parm. Est.*	*5% CI*	*95% CI*	*p*	*Parm. Est.*	*5% CI*	*95% CI*	*p*
(Intercept)	13.99	12.41	15.57	.00	12.10	10.37	13.83	.00
Political summary	.12	-.13	.37	.34	.05	-.19	.29	.69
Sex: Male	-1.17	-2.00	-.34	.01	-.70	-1.57	.17	.12
Age	.02	-.02	.06	.35	.04	.01	.08	.02
Ethnicity: White	-.83	-1.89	.24	.13	-.27	-1.29	.76	.61
Income	-.17	-.29	-.04	.01	-.05	-.16	.05	.32
Educ: Advanced degree	---	---	---	---	.00	-1.73	1.74	1.00
Educ: Associate's	-.51	-2.23	1.21	.56	.10	-1.85	2.05	.92
Educ: Bachelor's	-.34	-1.62	.94	.61	-.74	-2.21	.73	.33
Educ: Some associate's	-.50	-1.84	.84	.46	-.66	-2.14	.82	.38
Educ: Some adv. grad.	-1.37	-2.96	.22	.09	.01	-2.33	2.35	.99
Parenthood	.10	-.89	1.08	.84	---	---	---	---
Raven's test	---	---	---	---	-.12	-.62	.38	.63
Wonderlic test	---	---	---	---	-.82	-1.33	-.32	.00

Study 1: $N = 472$. Adjusted $R^2 = .03$, $F(10, 461) = 2.52$, $p = .006$. Women, "other" ethnicity, some high school/high school diploma, and non-parents are held at zero. Age is centered such that the intercept represents age 19.

Study 2: $N = 476$. Adjusted $R^2 = .06$, $F(12, 463) = 3.47$, $p < .001$. Women, "other" ethnicity, some high school/high school diploma, and non-parents are held at zero. Age is centered such that the intercept represents age 18. Parenthood status excluded for Study 2 due to large number of incompletes.

Table S7. Parameter estimates, 95% confidence intervals, and *p* values for models with the non-principal components analysis political summary measure as a predictor, weighted hazard credulity minus weighted benefit credulity as the outcome.

	Study 1				*Study 2*			
Variable	*Parm. Est.*	*5% CI*	*95% CI*	*p*	*Parm. Est.*	*5% CI*	*95% CI*	*p*
(Intercept)	-.27	-2.09	1.54	.77	.63	-1.25	2.51	.51
Pol. summary (non-PCA)	.18	.04	.32	.01	.27	.14	.40	.00
Sex: Male	-.57	-1.53	.39	.24	.51	-.43	1.46	.29
Age	.00	-.05	.04	.98	.03	-.01	.07	.16
Ethnicity: White	-.06	-1.28	1.17	.93	-.33	-1.44	.79	.57
Income	.04	-.11	.18	.63	-.01	-.12	.10	.87
Educ: Advanced degree	---	---	---	---	-.49	-2.37	1.40	.61
Educ: Associate's	.38	-1.60	2.36	.71	.15	-1.97	2.27	.89
Educ: Bachelor's	.18	-1.29	1.65	.81	.38	-1.21	1.98	.64
Educ: Some associate's	1.23	-.31	2.77	.12	.28	-1.34	1.89	.74
Educ: Some adv. grad.	.98	-.85	2.82	.29	.13	-2.42	2.67	.92
Parenthood	.67	-.46	1.81	.24	---	---	---	---
Raven's test	---	---	---	---	-.05	-.60	.49	.85
Wonderlic test	---	---	---	---	-.15	-.70	.40	.60

Study 1: $N = 472$. Adjusted $R^2 = .01$, $F(10, 461) = 1.66$, $p = .09$. Women, "other" ethnicity, some high school/high school diploma, and non-parents are held at zero. Age is centered such that the intercept represents age 19.

Study 2: $N = 476$. Adjusted $R^2 = .03$, $F(12, 463) = 2.08$, $p = .017$. Women, "other" ethnicity, some high school/high school diploma, and non-parents are held at zero. Age is centered such that the intercept represents age 18. Parenthood status excluded for Study 2 due to large number of incompletes.

Table S8. Parameter estimates, 95% confidence intervals, and *p* values for models with political summary measure as a predictor, with the unweighted difference between a participant's hazard and benefit credulity as the outcome.

	Study 1				*Study 2*			
Variable	*Parm. Est.*	*5% CI*	*95% CI*	*p*	*Parm. Est.*	*5% CI*	*95% CI*	*p*
(Intercept)	-.20	-.49	.10	.19	-.15	-.46	.16	.34
Political summary	.05	.01	.10	.03	.06	.02	.11	.00
Sex: Male	-.07	-.23	.08	.34	.14	-.01	.30	.07
Age	.00	-.01	.01	.87	.01	.00	.01	.06
Ethnicity: White	-.13	-.33	.06	.19	-.14	-.32	.05	.14
Income	.01	-.01	.04	.30	.01	-.01	.03	.47
Educ: Advanced degree	---	---	---	---	-.07	-.38	.24	.66
Educ: Associate's	.07	-.25	.39	.67	-.01	-.36	.34	.97
Educ: Bachelor's	-.04	-.28	.20	.74	.08	-.18	.35	.54
Educ: Some associate's	.14	-.11	.38	.28	.03	-.24	.30	.82
Educ: Some adv. grad.	.09	-.20	.39	.54	-.09	-.51	.33	.68
Parenthood	.14	-.04	.32	.14	---	---	---	---
Raven's test	---	---	---	---	.02	-.07	.11	.72
Wonderlic test	---	---	---	---	-.10	-.19	-.01	.03

Study 1: $N = 472$. Adjusted $R^2 = .01$, $F(10, 461) = 1.66$, $p = .09$. Women, "other" ethnicity, some high school/high school diploma, and non-parents are held at zero. Age is centered such that the intercept represents age 19.

Study 2: $N = 476$. Adjusted $R^2 = .03$, $F(12, 463) = 2.08$, $p = .017$. Women, "other" ethnicity, some high school/high school diploma, and non-parents are held at zero. Age is centered such that the intercept represents age 18. Parenthood status excluded for Study 2 due to large number of incompletes.

Table S9a. Parameter estimates, 95% confidence intervals, and *p* values for models with political summary measure as a predictor, with a participant's credulity for each hazard item (i.e., not their mean credulity) as the outcome.

	Study 1				*Study 2*			
Variable	*Parm. Est.*	*5% CI*	*95% CI*	*p*	*Parm. Est.*	*5% CI*	*95% CI*	*p*
(Intercept)	2.19	1.63	2.76	.00	2.11	1.50	2.72	.00
Political summary	.05	.01	.09	.01	.06	.03	.10	.00
Sex: Male	-.14	-.28	-.01	.04	.00	-.13	.13	1.00
Age	.00	-.01	.01	.72	.01	.00	.01	.00
Ethnicity: White	-.14	-.31	.03	.12	-.12	-.28	.04	.14
Income	-.01	-.03	.01	.28	.00	-.01	.02	.69
Educ: Advanced degree	---	---	---	---	-.09	-.36	.18	.52
Educ: Associate's	.06	-.22	.33	.67	-.02	-.31	.27	.89
Educ: Bachelor's	-.03	-.24	.17	.76	-.04	-.26	.19	.76
Educ: Some associate's	.09	-.13	.30	.43	-.15	-.38	.08	.21
Educ: Some adv. grad.	.09	-.17	.34	.49	-.03	-.40	.33	.87
Parenthood	.06	-.05	.26	.19	---	---	---	---
Raven's test	---	---	---	---	-.01	-.09	.06	.75
Wonderlic test	---	---	---	---	-.13	-.20	-.05	.00
Gravity	.09	.06	.13	.00	.10	.06	.13	.00

Study 1: $N = 472$. Variance explained by random intercepts for participant: .20, and for question: .48; residual variance: 2.57. Log likelihood = -7294.42.

Study 2: $N = 476$. Variance explained by random intercepts for participant: .13, and for question: .59; residual variance: 2.66. Log likelihood = -7357.97**.**

Table S9b. Parameter estimates, 95% confidence intervals, and *p* values for models with political summary measure as a predictor, with a participant's credulity for each benefit item (i.e., not their mean credulity) as the outcome.

	Study 1				*Study 2*			
Variable	*Parm. Est.*	*5% CI*	*95% CI*	*p*	*Parm. Est.*	*5% CI*	*95% CI*	*p*
(Intercept)	1.49	1.10	1.88	.00	1.39	1.04	1.75	.00
Political summary	.00	-.04	.04	.90	.02	-.02	.06	.26
Sex: Male	-.01	-.14	.12	.93	-.07	-.20	.06	.30
Age	.00	-.01	.00	.43	.00	.00	.01	.50
Ethnicity: White	.06	-.11	.23	.48	.05	-.10	.21	.50
Income	-.02	-.04	.00	.09	-.01	-.02	.01	.43
Educ: Advanced degree	---	---	---	---	.07	-.19	.33	.60
Educ: Associate's	.02	-.25	.29	.88	-.01	-.29	.28	.97
Educ: Bachelor's	.02	-.18	.22	.86	-.06	-.28	.16	.61
Educ: Some associate's	.00	-.20	.21	.97	-.15	-.37	.07	.19
Educ: Some adv. grad.	.09	-.15	.34	.46	.17	-.18	.53	.34
Parenthood	-.06	-.22	.09	.42	---	---	---	---
Raven's test	---	---	---	---	-.03	.97	1.12	.41
Wonderlic test	---	---	---	---	.03	-.05	.10	.45
Gravity	.30	.27	.33	.00	.30	.27	.33	.00

Study 1: $N = 472$. Variance explained by random intercepts for participant: .19, and for question: .15; residual variance: 2.42. Log likelihood = -7177.94.

Study 2: $N = 476$. Variance explained by random intercepts for participant: .16, and for question: .09; residual variance: 2.25. Log likelihood = -7041.79.

Table S10. Parameter estimates, 95% confidence intervals, and *p* values for models with political summary measure as a predictor and parenthood status as a control, weighted hazard credulity minus weighted benefit credulity as the outcome, Study 2.

Variable	*Parm. Est.*	*5% CI*	*95% CI*	*p*
(Intercept)	.83	-1.16	2.83	.41
Political summary	.57	.29	.86	.00
Sex: Male	.42	-.60	1.43	.42
Age	.03	-.02	.07	.23
Ethnicity: White	-.72	-1.92	.49	.25
Income	.04	-.08	.17	.52
Educ: Advanced degree	-.60	-2.60	1.41	.56
Educ: Associate's	.03	-2.27	2.32	.98
Educ: Bachelor's	.33	-1.41	2.06	.71
Educ: Some associate's	.32	-1.41	2.06	.71
Educ: Some adv. grad.	-.43	-3.26	2.40	.77
Raven's test	-.28	-.86	.30	.34
Wonderlic test	-.08	-.67	.50	.78
Parenthood	.10	-.96	1.17	.85

$N = 418$. Adjusted $R^2 = .03$, $F(13, 404) = 2.03$, $p = .017$. Women, "other" ethnicity, some high school/high school diploma, and non-parents are held at zero. Age is centered such that the intercept represents age 19.

Table S11. Parameter estimates, 95% confidence intervals, and *p* values for models with political summary measure as a predictor, weighted hazard credulity minus weighted benefit credulity as the outcome, including all liberals excluded for Study 2 analyses.

Variable	*Parm. Est.*	*5% CI*	*95% CI*	*p*
(Intercept)	.68	-.98	2.34	.42
Political summary	.56	.33	.79	.00
Sex: Male	.47	-.35	1.28	.26
Age	.02	-.02	.05	.32
Ethnicity: White	-.46	-1.43	.52	.36
Income	-.02	-.11	.08	.77
Educ: Advanced degree	-.62	-2.29	1.04	.46
Educ: Associate's	.63	-1.20	2.45	.50
Educ: Bachelor's	.51	-.89	1.91	.48
Educ: Some associate's	.23	-1.18	1.65	.75
Educ: Some adv. grad.	.44	-1.74	2.62	.69
Raven's test	-.15	-.63	.33	.55
Wonderlic test	-.21	-.70	.27	.39

$N = 607$. Adjusted $R^2 = .04$, $F(12, 594) = 3.09$, $p < .001$. Women, "other" ethnicity, some high school/high school diploma, and non-parents are held at zero. Age is centered such that the intercept represents age 19. Parenthood status excluded for Study 2 due to large number of incompletes.

Table S12. Parameter estimates, 95% confidence intervals, and *p* values for models with political summary measure as a predictor interacting with sex of the participant, weighted hazard credulity minus weighted benefit credulity as the outcome.

	Study 1				*Study 2*			
Variable	*Parm. Est.*	*5% CI*	*95% CI*	*p*	*Parm. Est.*	*5% CI*	*95% CI*	*p*
(Intercept)	-.27	-2.09	1.55	.77	.61	-1.27	2.49	.53
Political summary	.41	.01	.81	.04	.31	-.08	.69	.12
Sex: Male	-.57	-1.53	.39	.24	.53	-.41	1.47	.27
Age	.00	-.05	.05	.99	.03	-.01	.07	.13
Ethnicity: White	-.04	-1.27	1.19	.94	-.31	-1.42	.81	.59
Income	.04	-.11	.18	.62	.00	-.11	.11	.99
Educ: Advanced degree	---	---	---	---	-.58	-2.46	1.30	.55
Educ: Associate's	.37	-1.60	2.35	.71	.00	-2.13	2.12	.99
Educ: Bachelor's	.16	-1.31	1.64	.83	.31	-1.29	1.90	.71
Educ: Some associate's	1.21	-.34	2.75	.13	.21	-1.40	1.82	.80
Educ: Some adv. grad.	.96	-.88	2.80	.31	-.03	-2.58	2.51	.98
Parenthood	.66	-.47	1.80	.25	---	---	---	---
Raven's test	---	---	---	---	-.05	-.60	.49	.85
Wonderlic test	---	---	---	---	-.18	-.73	.37	.53
*Political Summary * Sex*	-.10	-.65	.46	.74	.43	-.08	.95	.10

Study 1: $N = 472$. Adjusted $R^2 = .01$, $F(11, 460) = 1.52$, $p = .12$. Women, "other" ethnicity, some high school/high school diploma, and non-parents are held at zero. Age is centered such that the intercept represents age 19.

Study 2: $N = 476$. Adjusted $R^2 = .03$, $F(13, 462) = 2.15$, $p = .011$. Women, "other" ethnicity, some high school/high school diploma, and non-parents are held at zero. Age is centered such that the intercept represents age 18. Parenthood status excluded for Study 2 due to large number of incompletes.

Table S13. Parameter estimates, 95% confidence intervals, and *p* values for models with political summary measure as a predictor interacting with the age of the participant, weighted hazard credulity minus weighted benefit credulity as the outcome.

	Study 1				*Study 2*			
Variable	*Parm. Est.*	*5% CI*	*95% CI*	*p*	*Parm. Est.*	*5% CI*	*95% CI*	*p*
(Intercept)	-.28	-2.10	1.53	.76	.63	-1.25	2.52	.51
Political summary	.15	-.36	.66	.57	.53	.07	1.00	.02
Sex: Male	.00	-.05	.04	.91	.03	-.01	.07	.18
Age	-.59	-1.55	.38	.23	.52	-.43	1.46	.29
Ethnicity: White	-.04	-1.26	1.19	.95	-.32	-1.44	.80	.57
Income	.03	-.11	.17	.69	-.01	-.12	.10	.87
Educ: Advanced degree	---	---	---	---	-.48	-2.37	1.40	.62
Educ: Associate's	.45	-1.53	2.43	.66	.14	-1.98	2.27	.90
Educ: Bachelor's	.20	-1.27	1.68	.79	.38	-1.22	1.98	.64
Educ: Some associate's	1.23	-.31	2.77	.12	.27	-1.34	1.89	.74
Educ: Some adv. grad.	1.07	-.77	2.91	.25	.12	-2.43	2.67	.93
Parenthood	.68	-.45	1.82	.24	---	---	---	---
Raven's test	---	---	---	---	-.05	-.59	.49	.86
Wonderlic test	---	---	---	---	-.15	-.70	.41	.60
*Political Summary * Age*	.01	-.01	.03	.33	.00	-.02	.02	.97

Study 1: $N = 472$. Adjusted $R^2 = .01$, $F(11, 460) = 1.59$, $p = .10$. Women, "other" ethnicity, some high school/high school diploma, and non-parents are held at zero. Age is centered such that the intercept represents age 19.

Study 2: $N = 476$. Adjusted $R^2 = .03$, $F(13, 462) = 1.93$, $p = .025$. Women, "other" ethnicity, some high school/high school diploma, and non-parents are held at zero. Age is centered such that the intercept represents age 18. Parenthood status excluded for Study 2 due to large number of incompletes.

Figure S1. The estimated effect of political orientation on the difference between hazard and benefit credulity with the terrorism item excluded, across five seeds for imputation (with 95% confidence intervals) for (A) Study 1 and (B) Study 2. The effect of political orientation on credulity was robust across the exclusion of any of the other 15 items.

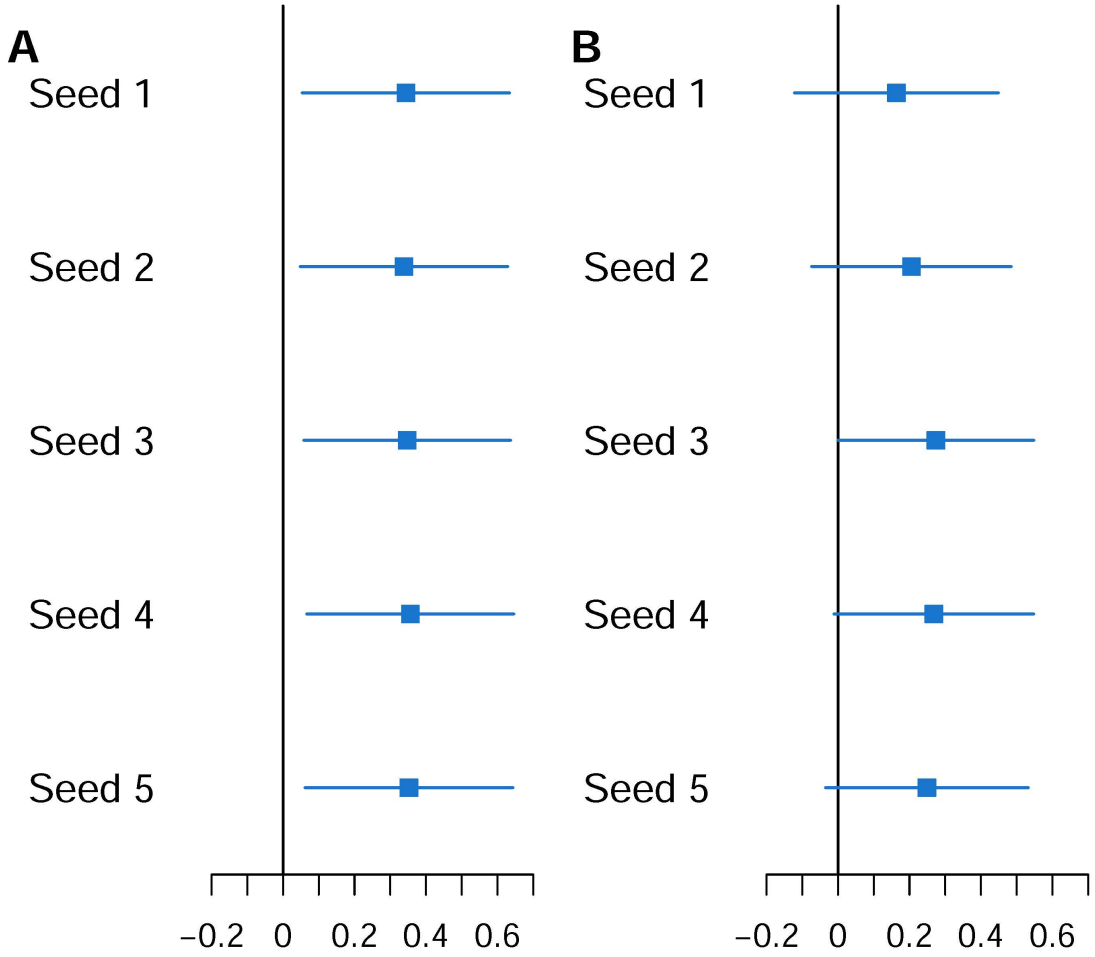


Figure S2. The estimated effect of political orientation on hazard credulity with the terrorism item excluded, across five seeds for imputation (with 95% confidence intervals) for (A) Study 1 and (B) Study 2. The effect of political orientation on credulity was robust across the exclusion of any of the other 15 items.

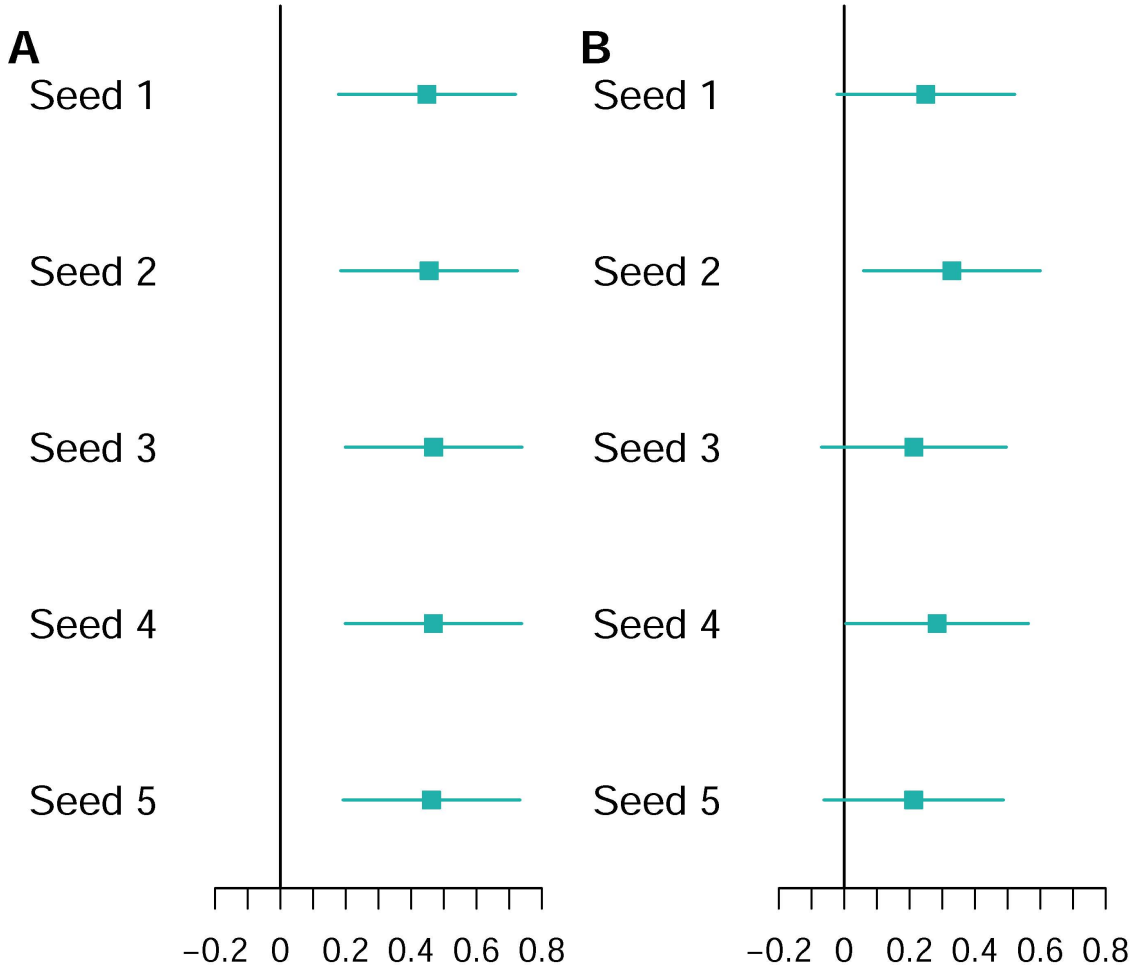


Figure S3a. LOESS fit of weighted hazard credulity by age for Study 1.

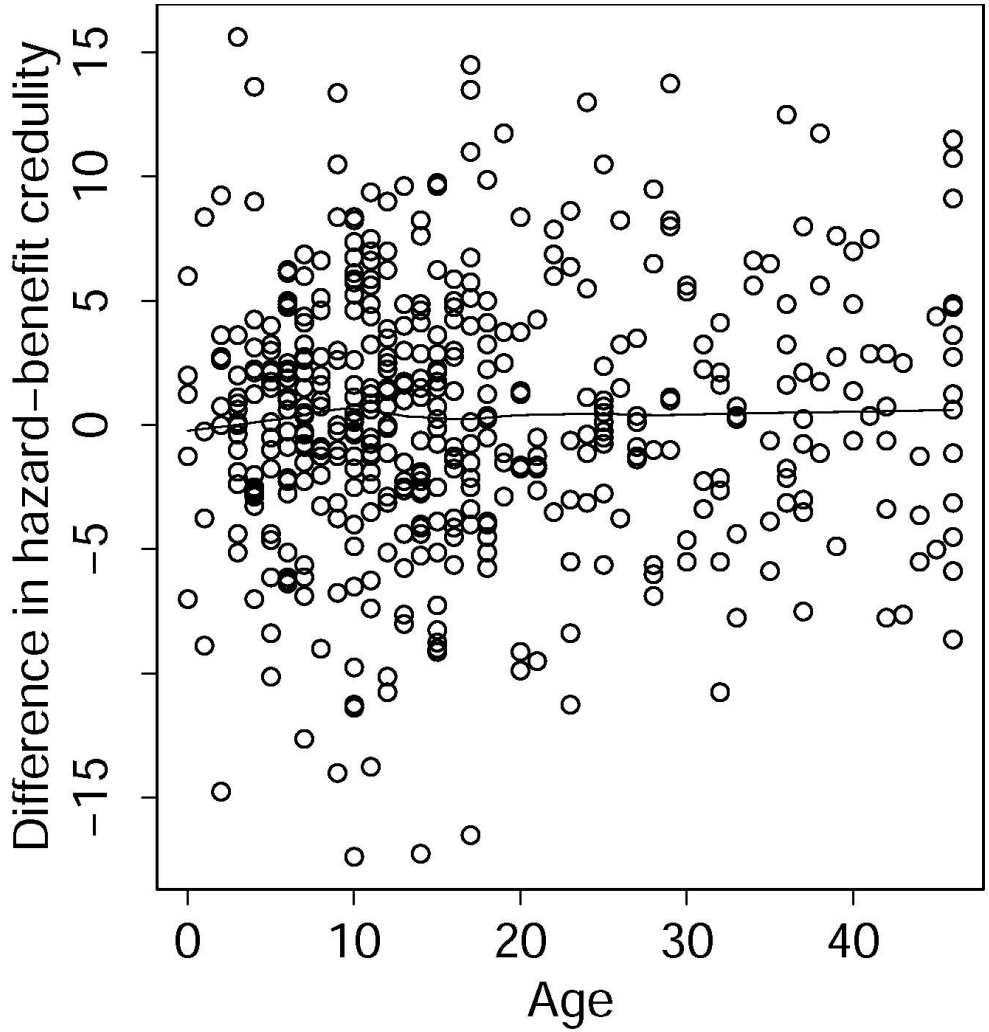
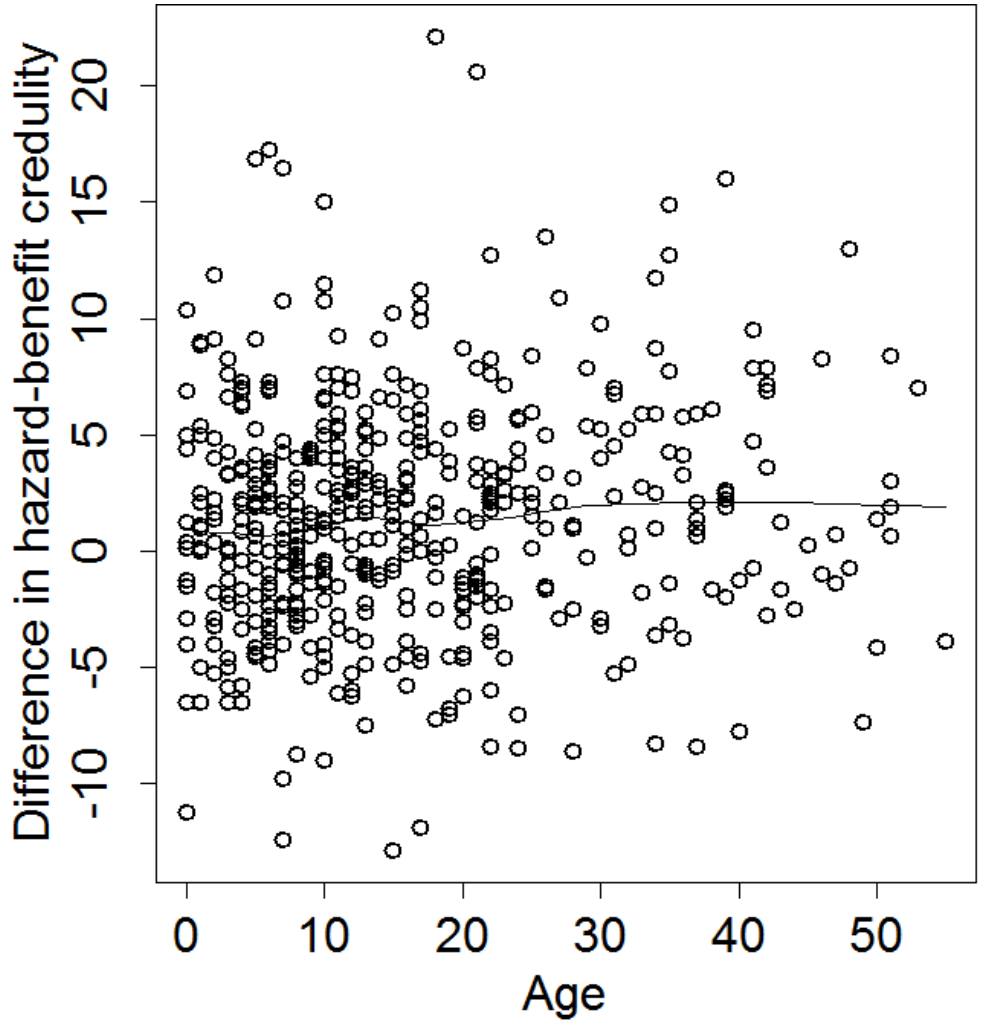


Figure S3b. LOESS fit of weighted hazard credulity by age for Study 2.



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