**Method**

Study 1 analyzed the effects of social consensus using a within-subjects design. Our measures were collected before and after the social consensus intervention, with the difference score between pre and post intervention as our main outcome measure. Participants were given a survey with several individual difference measures, then were randomized into one of two social consensus manipulations. The Institutional Review Board at the University of Missouri reviewed and approved all submitted materials for Study 1.

***Participants***

A total of 505 undergraduate students 18 years of age or older at the University of Missouri participated in this study. Participants were recruited through an online survey platform and were offered psychology course credit in exchange for their participation. Our final sample consisted of White (77%), Black (5.3%), Hispanic (6.7%), Asian (5.1%), and Native American (0.39%) students, additionally, a total of 12 students chose ‘other’ (2.4%) and 9 chose ‘prefer not to say’ (1.8%). For measurements of gender, 321 participants (63.6%) chose ‘Female’, 169 (33.5%) chose ‘Male’, 7 (1.4%) chose ‘Gender Variant or Nonconforming’, and 8 (1.6%) chose ‘prefer not to say’. Our participants ranged in age from 18 to 39 years old (*M* = 18.9, *SD* = 1.99).

***Materials and Procedure***

To manipulate the perception of social consensus, participants were randomized into a ‘high social consensus’ or ‘low social consensus’ condition. The condition (high or low social consensus) that our participants are assigned to, is our independent variable (IV). In both conditions, participants were given feedback consisting of the base rate of support that the general American public (in 2018) had for the four highly polarized issues. Participants in the ‘high social consensus’ condition saw results that were manipulated to be 20% higher than the true base rate. Likewise, participants in our ‘low social consensus’ condition saw results that were manipulated to be 20% lower than the true base rate (e.g., if the base rate is 65% of Americans agree that the Death Penalty is necessary in the US, the high condition would see 85% agree, and the low condition would see 45% agree). Finally, participants completed a number of individual difference measures and provided demographic information.

***Measures***

**Primary Outcome.** Participant support levels for each ‘highly polarized issue’ were captured as continuous variables ranging from strong disagreement (0) to strong agreement (100) with the following statements: “Greenhouse gas emissions generated by human activity has and will continue to change Earth's climate” (*Climate Change*), “The US government needs to implement Universal Health Care because basic population needs are not being met.” (*Universal Healthcare*), “Capital Punishment (the Death Penalty) is necessary in the US” (*Death Penalty*), and “Slavery, forced labor, and human trafficking are violations of human rights.” (*Slavery*).

The above measure of support levels were also used by participants to estimate the level of support the American public had for these issues (in 2018 and in 2024). Lastly, participants were asked to rate how ‘surprised’ they were at the results for the (manipulated) survey of the 2018 American public. Surprise was measured with a 5-point Likert scale ranging from ‘Not Surprised’ (1) to ‘Very Surprised’ (5).

Individual differences in deontological and utilitarian orientation were measured using the Ethical Standards of Judgement Questionnaire (ESJQ) developed by Love, Salinas, and Rotman (2020). Six items measure deontological orientation (e.g., “Solutions to ethical problems are usually black and white”) and six items measure utilitarian orientation (e.g., “When people disagree over ethical matters, I strive for workable compromises”). Participant agreement with these statements was measured with 5-point Likert scales ranging from ‘Strongly Disagree’ (1) to ‘Strongly Agree’ (5). Each six-item subscale showed satisfactory internal consistencies with Cronbach’s α of .783 (deontology) and .750 (utilitarianism).

Individual differences in health literacy were measured using the Single Item Health Literacy Screener (SILS) developed by Morris, MacLean, Chew, and Littenberg (2006). Health literacy is measured by self-reported confidence with medical forms (e.g., “How confident are you filling out medical forms by yourself?”). Confidence is measured with a 5-point Likert scale ranging from ‘Never’ (1) to ‘Always’ (5).

Individual differences in Numeracy were measured using two tools. Subjective numeracy was measured using the Subjective Numeracy Scale (SNS) developed by Zikmund-Fisher, Smith, Ubel, and Fagerlin (2007). Four items measure cognitive abilities (e.g., “How good are you at working with fractions”), rated with 5-point Likert scales ranging from ‘Not at all good’ (1) to ‘Extremely good’ (5). An additional four items measure preference for numeric information (e.g., “When reading the newspaper, how helpful do you find tables and graphs that are parts of a story?”), rated with 5-point Likert scales such as ‘Not at all helpful’ (1) to ‘Extremely helpful’ (5). Objective numeracy was measured using a number line estimation task adapted from Sigler, Thompson, and Schneider (2011). This task consisted of placing a total of 20 fractions (e.g., 1/19, 1/7, 3/8, 11/14, 17/4, 9/2, etc.) in the correct place, on a number line ranging from 0-1 or 0-5. Performance was rated as total percent absolute error accumulated across all fractions, defined as: (|Answer - Correct Answer|) / Numerical Range.

***Power and Statistical Analysis***

We originally planned to recruit approximately 180 participants. This minimum sample size was determined a-priori using G-power 3.1.9.7 with the following parameters: seeking the difference between two independent means (two groups), an effect size of .5, an alpha of .05, and a power of .95, for a linear multiple regression. The four highly polarized beliefs that were surveyed (climate change, death penalty, support for UHC, slavery) were all treated as continuous variables. We examined the effects of experimental condition (high or low social consensus) and individual differences (deontological and utilitarian orientation, health literacy, multiple measures of numeracy) on our outcome measure. We examined the main effect, as well as interactions between deontology and utilitarianism with our experimental conditions for our predictors. All tests were conducted in R and considered statistically significant when P <.05.

***Study 1 Hypothesis:***

Hypothesis 1: The social consensus manipulation will result in different levels of support for highly polarized issues, positively correlated with the social consensus manipulation, such that high levels of social consensus result in increased support.

Hypothesis 2: Individual differences in Utilitarian orientation (H2a) and Deontological orientation (H2b) will result in different levels of support for the highly polarized issues.

For our results, say, we tested hypothesis 1 with X and Y – the results of which indicate X and Y about hypothesis 1. To test hypothesis 2, we did x and y and blah blah.