

# Sociopolitical Intellectual Humility as a Predictor of Political Attitudes and Behavioral Intentions

Elizabeth J. Krumrei-Mancuso<sup>a</sup>, Brian Newman<sup>b</sup>

[a] *Psychology Department, Pepperdine University, Malibu, CA, USA.* [b] *Political Science Department, Pepperdine University, Malibu, CA, USA.*

Journal of Social and Political Psychology, 2021, Vol. 9(1), 52–68, <https://doi.org/10.5964/jspp.5553>

Received: 2019-07-06 • Accepted: 2020-10-07 • Published (VoR): 2021-02-19

Handling Editor: Zoe Leviston, Australian National University, Canberra, Australia

Corresponding Author: Elizabeth J. Krumrei-Mancuso, Social Science Division, Pepperdine University, 24255 Pacific Coast Hwy, Malibu, CA, 90263, USA. E-mail: [elizabeth.mancuso@pepperdine.edu](mailto:elizabeth.mancuso@pepperdine.edu)

Supplementary Materials: Materials [see [Index of Supplementary Materials](#)]



## Abstract

Recent research has highlighted the relevance of intellectual humility to politics. Among a U.S. sample (N = 852), we examined self-reported sociopolitical intellectual humility (SIH), a nonthreatening awareness of the fallibility of one's views about topics central to society and politics. SIH was associated with being less likely to dislike/avoid political discussion, and with more political tolerance, less social dominance orientation, and more values and behavioral intentions focused on social equality, even when controlling political orientation and other relevant factors. SIH was also associated with more positive and less negative views of an individual expressing a political viewpoint. Further, SIH moderated the extent to which initial agreement with a political statement resulted in opinion change on the basis of hearing another person's arguments on the topic. These findings may point to ways SIH is relevant to people's attitudes toward others in society.

## Keywords

sociopolitical intellectual humility, public discourse, political tolerance, social dominance orientation, social equality, political engagement

## Non-Technical Summary

### Background

Many people consider public discourse in the United States to be negative, extremely polarized, and uncivil. People are often angry at those with different viewpoints. This atmosphere can hamper social and political progress and even threaten personal relationships.

### Why was this study done?

Intellectual humility might play a positive role in public discourse. Intellectual humility involves a person's ability to recognize that his or her knowledge, opinions, or beliefs might be wrong. We thought people's levels of humility about their social and political viewpoints and the extent to which they appreciate others' viewpoints would be related to certain attitudes and behaviors relevant to healthy interactions with others.

### What did the researchers do and find?

We conducted an online survey with a national U.S. sample of 852 adults. We measured participants' humility about their social and political viewpoints, how much participants enjoy engaging in political discussions, how tolerant participants are of those



with different social and political viewpoints, how much participants want their own social group to dominate other social groups, how much participants value social equality, how participants rate a person expressing a political perspective, and whether participants adjust their own opinion when considering the political viewpoint of another person.

Our results showed that those who were more humble about their social and political viewpoints enjoyed political discussions more and avoided them less. Sociopolitical intellectual humility was also related to participants' attitudes toward others in society. Specifically, being humble about one's social and political viewpoints was related to participants being more politically tolerant of others – even of those they disagreed with most, being less interested in their group socially dominating others, believing more strongly in the equality of all people, and planning to work toward social equality more. Being higher in sociopolitical intellectual humility was also related to forming more positive and less negative opinions of another person expressing a political opinion, regardless of whether the participant agreed or disagreed with the opinion. The way in which participants were impacted by hearing another person's argument on the topic of immigration depended on whether the argument was consistent or inconsistent with a participant's existing viewpoint. If participants' viewpoints already aligned with the opinion, being higher in intellectual humility was related to a greater increase in agreement after hearing the other person's opinion. If participants' viewpoints were inconsistent with the shared opinion, being higher in intellectual humility was related to less increase in agreement after hearing the other person's opinion. The findings were not the result of other factors, such as the participant's political party, religiosity, income, or social desirability tendencies.

### What do these findings mean?

The positive link between being humble about one's sociopolitical viewpoints and enjoying engaging in more political discussions suggests that people can both be humble about and care about social and political topics. In addition, we repeatedly observed a connection between sociopolitical intellectual humility and attitudes towards people in society, with a tendency toward being more inclusive and tolerant and viewing others more favorably. This suggests that being humble about one's sociopolitical viewpoints might help individuals engage in public discourse without demanding their own group's dominance, denying basic rights to opposing groups, or thinking ill of people they disagree with. Finally, we found that being humble about one's sociopolitical views is related to opinion change only when this seems warranted to the individual. Thus, sociopolitical intellectual humility does not seem to make a person easy to manipulate on sociopolitical topics.

When Americans are asked about the most important problem facing the country today, social issues such as immigration top the list (Gallup, 2019). Discussions surrounding sociopolitical topics have been described as highly polarized (e.g., Abramowitz, 2010; Iyengar & Westwood, 2015), negative (e.g., Abramowitz & Webster, 2016), uncivil (e.g., Mutz, 2015), and marked by outrage (e.g., Sobieraj & Berry, 2011). Many people are angry at the “other” political party (Pew Research Center, 2016) and ideological differences even threaten personal relationships (Chen & Rohla, 2018; Iyengar, Sood, & Lelkes, 2012).

Intellectual humility (IH) may have a positive role to play in this complicated social environment. Researchers have emphasized a variety of intrapsychic and interpersonal features of IH, with most definitions centering on people's ability to recognize the fallibility of their knowledge. Connections can be made to dual-processing theories of cognition, which recognize that humans engage both in fast, automatic, intuitive thinking as well as slow, deliberate, analytic thinking (Kahneman, 2011). Automatic thinking is efficient and often adequate, but can, in some instances, result in problematic biases (Kahneman, 2011; Stanovich & West, 1997). Some have conceptualized problematic heuristics and biases as intellectual arrogance, with IH being a potential antidote (Samuelson & Church, 2015).

Historically, viewing humility in a positive light has been controversial and psychologists and philosophers have been thoughtful about the circumstances under which humility is and is not considered favorable (e.g., Davis & Hook, 2014; Owens, Rowatt, & Wilkins, 2012; Whitcomb, Battaly, Baehr, & Howard-Snyder, 2017). Despite this, most contemporary psychological research, shaped by the field of positive psychology, has examined IH as a potentially beneficial quality (see Hoyle & Krumrei-Mancuso, 2021, for review). In this vein, the current research focused on potentially beneficial correlates of IH, as we theorized approaching issues with a sense of intellectual fallibility and appreciation for others' perspectives would be associated with viewing individuals and groups participating in politics more charitably.

In contrast, low IH may decrease tolerance for others' civil liberties, increase antipathy toward individuals who hold opposing opinions, and increase a desire for social dominance. As such, studying IH may help us understand some of the roots of current sociopolitical conflict.

To date, IH has been found to relate to numerous interpersonal benefits that might positively impact the sociopolitical sphere, including greater empathy, open-mindedness, tolerance toward diverse people and ideas, and prosocial values (Krumrei-Mancuso, 2017; Krumrei-Mancuso & Rouse, 2016; McElroy et al., 2014). Emerging research has begun to examine the role of IH in relation to explicitly political scenarios, finding that IH is related to more openness to learning about opposing political views (Porter & Schumann, 2018) and more benevolent perceptions of politicians who change their minds (Leary et al., 2017). These studies demonstrate the relevance of IH to sociopolitical attitudes and open the door for replicating and expanding these findings with assessments of IH that target sociopolitical issues, specifically.

Research has demonstrated that contexts can challenge people's humility to greater and lesser extents (e.g., Davis et al., 2016) and that IH within a particular domain depends not only on dispositional levels of IH, but also on the basis and extremity of a person's views within a particular domain (Hoyle, Davisson, Diebels, & Leary, 2016). For these reasons, there may be an added value to examining links between IH and sociopolitical outcomes when participants are asked to think about their levels of IH specific to sociopolitical topics, rather than their IH in general.

We believe Hoyle et al. (2016) were the first to examine IH specific to politics. Krumrei-Mancuso and Newman (2020) later examined sociopolitical IH (SIH), defined as a nonthreatening awareness of the fallibility of one's views about topics central to society and politics. The current study further explores links between SIH and attitudes toward others in the political domain, based on the assumption that SIH involves not only how people view their own knowledge (e.g., that they might be wrong about an issue), but also how they view others' knowledge (e.g., that a diversity of perspectives is enriching rather than threatening).

## Attitudes Toward Others

We anticipated SIH would be associated with more inclusive, accepting, and benevolent attitudes toward individuals and groups in the political arena. Previous research on religious outcomes has highlighted IH is associated with more tolerance toward different religious beliefs, more moderate reactions to others' religious views, less judgment of others' religious opinions, experiencing more belonging and meaning in imagined ideologically diverse religious groups, and more forgiveness of religious offenses (Hook et al., 2017; Hopkin, Hoyle, & Toner, 2014; Leary et al., 2017; Van Tongeren et al., 2016; Zhang et al., 2015; Zhang et al., 2018). With regard to political outcomes, Porter and Schumann (2018) found IH was associated with people offering more respectful attributions for differences in views on often contentious issues (e.g., same-sex marriage, gun control, tax increases funding education), viewing the issues as complex rather than viewing the other person as less intelligent. IH has also been associated with more favorable views of politicians who change their minds on an issue (Leary et al., 2017). SIH, specifically, has been associated with less affective polarization with regard to political and religious groups, meaning SIH may suppress the extent to which individuals favor their own in-groups over their out-groups (Krumrei-Mancuso & Newman, 2020). These findings demonstrate that (S)IH relates not only to how people view knowledge, but also to how people view those who differ in opinion.

Our goal was to extend this previous work by assessing how SIH relates to views of others articulating a political perspective. We did so in the highly-fraught context of immigration. Immigration has been among the most important issues to the American public during the Trump presidency (Gallup, 2019; Newport, 2018; Pew Research Center, 2018). Since those high in SIH are not overconfident in their own perspectives and do not feel threatened when others offer views contradicting their own, we hypothesized SIH would predict more positive reactions and less negative reactions to someone articulating a personal view on immigration. We specifically examined views about the DREAM Act as a topic we expected some participants to agree and some to disagree with. This allowed us to observe how the role of SIH may differ when people are presented with another person's congenial versus uncongenial views.

We expected SIH to be relevant not only to attitudes toward individuals, the level most commonly examined in IH literature, but also to people's attitudes toward groups in society. Thinking about politics in the U.S. today largely involves thinking about groups and their members (e.g., partisan, racial/ethnic, religious, gender, sexual identity, and other groups; Mason, 2015; Mason & Wronski, 2018). Attitudes toward social groups are fundamentally important in

people's political attitudes and today's public discourse (Mason, 2015). We hypothesized SIH, which involves acknowledging potential weaknesses in one's sociopolitical views and seeing value in diverse ways of thinking, would be linked to more tolerance of ideologically different groups, including having a greater willingness to grant civil liberties, like the freedom of speech, to specific groups one fundamentally disagrees with. We also expected those higher in SIH to be less likely to assume the groups they belong to are absolutely right and should therefore dominate the sociopolitical sphere. On this basis, we expected SIH would predict less social dominance orientation (SDO) and a greater desire for social equality, two powerful predictors of intergroup attitudes and prejudice (Bergh, Sidanius, & Sibley, 2015).

The current study builds on previous findings that general humility predicts less SDO (Desimoni & Leone, 2014; Lee, Ashton, Ogunfowora, Bourdage, & Shin, 2010; Sibley, Harding, Perry, Asbrock, & Duckitt, 2010), and does so more strongly than other personality factors (Lee et al., 2013; Leone, Chirumbolo, & Desimoni, 2012). This is based on the theory that emphasizing social status and considering oneself superior (i.e., low humility) are motivations for preferring hierarchy over equality in society because a hierarchical society is more likely than an egalitarian society to allow individuals low in humility to obtain the superior status and wealth to which they believe they are entitled. Specifically, it seems humility is more closely associated with the ethnocentric orientation of SDO (wanting one's own group to dominate) than a general preference for unequal social relations (Bergh et al., 2015). There is some indication the humility-SDO link is mediated by competitive jungle beliefs, the view that people must compete ruthlessly to prevail in society (Leone et al., 2012). Thus, humility may motivate less competitive jungle beliefs, and thereby decrease motives to dominate and be superior to others. Given this research is based on general humility, sometimes in combination with honesty, we expected SIH to be a more specific and therefore even more precise predictor of less SDO and higher preference for social equality.

## Change in Perspective

Another goal of this research was to explore how SIH would relate to opinion change about a political issue when presented with another person's opinion and argument. Since people high in IH are open to the possibility their view is wrong, they may be more attentive to new information, which could open the door to altering perspectives, when warranted. Individuals high in IH understand their own and others' intellectual fallibility alike. Perhaps for this reason, IH is associated with more openness to learning about opposing viewpoints on contentious issues (Porter & Schumann, 2018), more seeking out and thinking about information (Krumrei-Mancuso, Haggard, LaBouff, & Rowatt, 2020), and more attunement to the strength of persuasive arguments (Leary et al., 2017). Research has shown that IH is linked to attitude change after a conversation with someone holding an opposing view, though only if the conversation partner is perceived to be high in IH as well (Rodriguez et al., 2019). Further, under particular circumstances, SIH is associated with being more responsive to factual information on the topic of immigration (Krumrei-Mancuso & Newman, 2020). Based on this body of literature, we examined whether SIH would be associated with a greater likelihood that people's opinions would be influenced in response to another person making an argument about the controversial topic of immigration.

## Political Engagement

In examining the topics described, it is important to differentiate SIH from sociopolitical apathy or diffidence. Previous research has linked IH to more self-reported political engagement (Porter & Schumann, 2018) and SIH to more interest in politics, less of a tendency to avoid/dislike political discussions, and no increase or decrease in voting in elections or otherwise participating in political life (Krumrei-Mancuso & Newman, 2020). This does not paint a picture of SIH as political apathy or weakness. To verify this in the current sample, we examined links between SIH and dislike/avoidance of engaging in political discussions. Politics evoke strong feelings, making it is easy for people to take offense and for conversations to end badly. Given the association between IH and favorable views of others in political contexts (Leary et al., 2017; Porter & Schumann, 2018), we expected those higher in SIH, who are relatively unthreatened by ideological opposition, may have more positive experiences when discussing politics, and therefore may be more interested in engaging in political discussions.

## Summary of Hypotheses

As reviewed, IH relates to attitudes and behaviors relevant to healthy engagement in public discourse. Based on extant theory and empirical findings, we examined SIH's association with engagement in political discussions, attitudes toward groups and individuals, and opinion change. We hypothesized SIH would be associated with less avoidance/dislike of political discussions, more political tolerance, less SDO, more social equality attitudes and behavioral intentions, more favorable views of an individual expressing a political perspective, and a greater likelihood of adjusting one's opinion when considering another person's political perspective.

## Method

### Participants

We used quota sampling to recruit a national U.S. sample of 852 adults via Amazon Mechanical Turk (Mturk), ranging in age from 18 to 99 years ( $M = 38.08$ ,  $SD = 11.72$ ). Table 1 provides a summary of demographic characteristics compared to those of the U.S. population. A more detailed comparison is available in the [Supplementary Materials](#).

**Table 1**

*Description of the Current Sample ( $N = 852$ ) With U.S. Population Comparison Data*

Demographic characteristics	Current sample (%)	U.S. population estimates (%)
<b>Gender</b>		
Female	50.6	50.8
Male	49.2	49.2
<b>Race</b>		
Caucasian	79.6	76.6
Black or African American	10.1	13.4
Asian	5.4	5.8
American Indian or Alaska Native	0.8	1.3
Multi-racial	4.1	2.7
<b>Ethnicity</b>		
Latinx or Hispanic	7.7 <sup>a</sup>	18.1
<b>Region</b>		
Northeast	18.5	17.3
Midwest	21.7	20.9
West	21.4	23.8
South	38.4	38.0
<b>Political identification</b>		
Democrat	37.6	34.9
Republican	27.5	28.1
Independent	30.3	32.1
Other party	1.5	3.3
No preference or don't know	3.2	1.6

*Note.* For categories not totaling 100%, the remaining percentage declined to answer. U.S. population estimates are from: U.S. Census Bureau (2017a) for gender, race, and ethnicity; U.S. Census Bureau (2017b) for region; American National Election Studies (2016) for political identification.

<sup>a</sup>Latinx-only.

## Measures

Data were collected as part of a larger, grant-funded study on IH in relation to politics, altruism, and religion. The scales reported in the current paper are described below.

### Sociopolitical Intellectual Humility

We made use of the 22-item ( $\alpha = .89$ ) Comprehensive Intellectual Humility Scale to assess intellectual humility (Krumrei-Mancuso & Rouse, 2016). This scale represents a higher order factor consisting of four factors: (1) a healthy independence between intellect and ego, such that intellectual disagreements do not feel threatening to a person's sense of self (e.g., "When someone contradicts my most important beliefs, it feels like a personal attack," reverse scored), (2) openness to reconsidering one's viewpoint and revising it, if warranted (e.g., "I'm willing to change my mind once it's made up about an important topic"), (3) respect for diverse ways of thinking and others' rights to their own viewpoints (e.g., "I welcome different ways of thinking about important topics"), and (4) lack of overconfidence in one's knowledge (e.g., "When I am really confident in a belief, there is very little chance that belief is wrong," reverse scored). In the current study, the scale instructions were adapted to ask participants to think about their "beliefs and ideas about topics relevant to society and politics (e.g., immigration, economic policy, the environment, gun control, abortion, gender disparities, rights of sexual minorities, religious freedom, foreign policy, and so forth)" and to use this as the context for indicating their level of agreement with each scale item. Items were rated on a Likert scale from (1) *strongly disagree* to (5) *strongly agree*.

### Dislike of Political Discussion

We used three items ( $\alpha = .85$ ) to assess dislike and avoidance of political discussion: "I avoid discussing my views about political topics with other people," "I dislike talking about political topics," and "I dislike other people questioning my views about political topics" (Krumrei-Mancuso & Newman, 2020). Items were rated on a Likert scale from (1) *strongly disagree* to (5) *strongly agree*.

### Political Intolerance and Tolerance

We used the six-item ( $\alpha = .79$ ) Political Intolerance scale to evaluate the extent to which participants disagreed with granting full civil liberties (e.g., freedom of speech) to "people who disagree with me politically," "those who threaten government stability," "people with beliefs that are outside of the norm," etc. (Dunwoody & Funke, 2016).

We used three items ( $\alpha = .85$ ) from the Freedom and Tolerance Surveys to assess political tolerance toward a least-liked group (Gibson, 2013). Earlier in the survey, participants selected which group they disagreed with most out of a list of 13 ideological groups (atheists, black lives matter activists, blue lives matter activists, communists, conservatives, gay/lesbian activists, feminists, liberals, pro-choice activists, pro-life activists, radical Muslims, religious fundamentalists, white nationalists). Later in the survey, each participant's selected group was populated into political tolerance items about the extent to which participants believed the group should be allowed to make a speech or hold public rallies in their community or run for public office. On both measures, items were rated on a Likert scale from (1) *strongly disagree* to (5) *strongly agree*.

### Social Dominance and Equality Orientations

We assessed SDO with the 4-item ( $\alpha = .86$ ) Short Social Dominance Orientation scale (Pratto et al., 2013). SDO reflects a preference for social inequality that allows one group to dominate over other groups, often on the basis of demographic factors such as sex, race, nationality, or religion. Higher scores indicate a greater preference for social dominance rather than group inclusion/equality in society. Items were rated on a Likert scale from (1) *extremely oppose* to (10) *extremely favor*.

We assessed social equality orientation, or the inverse of SDO, with two subscales of the Social Justice Scale (Torres-Harding, Siers, & Olson, 2012) assessing attitudes (11 items,  $\alpha = .95$ ) and behavioral intentions (4 items,  $\alpha = .91$ ) focused on caring for the physical and emotional wellbeing of all individuals regardless of their group status, the desire

to minimize social power inequalities, and support for all individuals in society having influence on the decisions affecting their lives. The attitudes subscale assesses valuing social equality and the behavioral intentions subscale assesses a person's intentions to engage in social equality activities and behaviors. Items were rated on a Likert scale from (1) *strongly disagree* to (7) *strongly agree*.

### Responses to Others' Opinions

Modeled after the work of Saucier and Webster (2010), we developed an assessment of participants' responses to the opinions of others and the extent to which participants changed their opinions on the basis of others' opinions.

Participants rated their agreement with a statement in support of the Development, Relief, and Education for Alien Minors (DREAM) Act: "I believe undocumented immigrants who entered the U.S. as minors should be allowed to stay in the U.S. as adults" on a Likert scale from (1) *strongly disagree* to (6) *strongly agree*. Participants then rated how important the topic of immigration was to them on a Likert scale from (1) *not at all important* to (5) *extremely important*. Participants were then presented with a 3-sentence opinion and argument in favor of allowing undocumented immigrants to stay in the U.S., and asked to rate the author of the opinion on 8 adjectives presented in randomized order (*unpleasant, offensive, immoral, prejudiced, likable, friendly, intelligent, agreeable*) on a Likert scale from (1) *not at all* to (9) *very much*. We summed these into a negative ratings scale (first four adjectives;  $\alpha = .89$ ) and a positive ratings scale (last four adjectives;  $\alpha = .95$ ). Participants were then asked to again rate their agreement with the pro-DREAM Act statement. We calculated a difference score for opinion change by subtracting the initial level of agreement with this statement from the final level of agreement with this statement.

### Social Desirability

We used the 5-item ( $\alpha = .78$ ) Socially Desirable Response Set-5 to assess participants' tendency to respond to survey items in a socially favorable way (Hays, Hayashi, & Stewart, 1989). Items were rated on Likert scale from (1) *definitely false* to (5) *definitely true*.

### Procedure

This study received Institutional Review Board approval. After giving informed consent, participants completed an online survey with counterbalanced order. Participants were paid commensurate with the length of the survey.

We used G\*Power 3.1 to conduct an a priori power analysis. Planned group comparisons would require 620 participants to detect an effect size of .20 with .8 power and a .05 probability of a Type I error.

We deleted cases listwise for participants who spent less than 5 minutes completing the survey ( $n = 4$ ), responded incorrectly to a factual question embedded in the survey as a measure of attention ( $n = 5$ ), or indicated at the end of the survey that they had not paid attention to the questions ( $n = 4$ ). We conducted the Confirmatory Factor Analyses with Mplus8 1.7 and all other analyses with SPSS Statistics 23.

## Results

### Preliminary Analyses

To ensure construct differentiation between SIH and the outcomes examined, we conducted confirmatory factor analyses for SIH and each outcome measure, comparing a one-factor solution of the SIH items combined with the items of each respective outcome measure and a two-factor solution with separate latent variables for SIH and each respective outcome measure. In all cases, the two-factor model fit the data significantly better than the one-factor model, supporting distinction between SIH and the outcomes: SIH/dislike of political discussion  $\Delta\chi^2(1) = 990.72, p < .001$ ; SIH and political intolerance  $\Delta\chi^2(1) = 563.58, p < .001$ ; SIH and political tolerance  $\Delta\chi^2(1) = 1553.15, p < .001$ ; SIH and SDO  $\Delta\chi^2(1) = 1218.92, p < .001$ ; SIH and social equality attitudes  $\Delta\chi^2(1) = 2356.53, p < .001$ ; SIH and social equality behavioral intentions  $\Delta\chi^2(1) = 1970.95, p < .001$ .

We evaluated a number of potential control variables. SIH correlated negatively with having a religious affiliation ( $r_{pb} = -.14, p < .001$ ) and positively with annual household income ( $r = .07, p = .04$ ). Therefore, these variables were controlled in subsequent analyses. Given the political nature of the outcome variables, we made an a priori decision to control political party identification. An analysis of variance indicated there were differences in levels of SIH on the basis of party identification,  $F(4, 847) = 6.77, p = .01$ . Although Republicans and Democrats did not differ from one another in their levels of SIH ( $p = .08$ ), Republicans, and not Democrats, scored lower in SIH than Independents ( $p = .01$  for Republicans and  $p = .20$  for Democrats). Social desirability bias is common to the measurement of many constructs in psychology. Even though research has shown shared variance between measures of humility and social desirability may result from social desirability tapping into substantive traits, such as modesty (de Vries, Zettler, & Hilbig, 2014), we made a conservative a priori decision to control socially desirability tendencies. SIH correlated positively with social desirability ( $r = .21, p < .001$ ). We also made an a priori decision to control education when examining the outcome of engagement in political discussions, given education is frequently a predictor of political activity (Verba, Scholzman, & Brady, 1995). SIH was not correlated with education ( $r = .03, p = .43$ ) and did not differ on the basis of other demographic factors, including age ( $r = .06, p = .08$ ), identifying as male ( $r_{pb} = -.05, p = .15$ ), race,  $F(5, 846) = 1.06, p = .38$ , and region of residence,  $F(3, 848) = .86, p = .46$ .

### Sociopolitical Intellectual Humility Predicting Political Engagement and Attitudes

We conducted hierarchical linear regressions to examine SIH as a predictor of various political outcomes, after accounting for control variables (see Table 2).

**Table 2**

*Hierarchical Regressions of Sociopolitical Intellectual Humility (SIH) Predicting Sociopolitical Outcomes (N = 799)*

Predictor	Dislike of political discussion				Political intolerance				Political tolerance toward disagreeable group			
	B (SE)	95% CI	β	ΔR <sup>2</sup>	B (SE)	95% CI	β	ΔR <sup>2</sup>	B (SE)	95% CI	β	ΔR <sup>2</sup>
<b>Step 1</b>				.035***				.046***				.025**
Democrat	-0.41 (0.26)	-0.93, 0.10	-0.06		0.98 (0.36)	0.28, 1.68	0.11**		-0.37 (0.30)	-0.95, 0.21	-0.05	
Republican	0.17 (0.29)	-0.40, 0.74	0.02		1.46 (0.40)	0.69, 2.24	0.15***		-0.33 (0.33)	-0.98, 0.31	-0.04	
Religiously affiliated	0.32 (0.26)	-0.19, 0.82	0.05		1.42 (.35)	0.73, 2.10	0.15***		-0.89 (0.29)	-1.46, -0.32	-0.11**	
Annual household income	0.00 (0.00)	0.00, 0.00	-0.06		-0.00 (0.00)	0.00, 0.00	-0.02		0.00 (0.00)	0.00, 0.00	0.06	
Education	-0.21 (0.13)	-0.46, 0.05	-0.06									
Social desirability	-0.10 (0.03)	-0.15, -0.06	-0.15***		-0.02 (0.03)	-0.08, 0.05	-0.02		-0.06 (0.03)	-0.11, -0.00	-0.07*	
<b>Step 2</b>				.041***				.194***				.043***
SIH	-0.06 (0.01)	-0.08, -0.04	-0.21***		-0.18 (0.01)	-0.20, -0.15	-0.47***		0.07 (0.01)	0.05, 0.09	0.22***	
	Social dominance orientation				Social equality attitudes				Social equality behavioral intentions			
	B (SE)	95% CI	β	ΔR <sup>2</sup>	B (SE)	95% CI	β	ΔR <sup>2</sup>	B (SE)	95% CI	β	ΔR <sup>2</sup>
<b>Step 1</b>				.216***				.111***				.113***
Democrat	-2.68 (0.65)	-3.95, -1.41	-0.15***		4.02 (0.92)	2.21, 5.82	0.17***		2.41 (0.82)	1.56, 3.25	0.21***	
Republican	6.54 (0.72)	5.13, 7.95	0.33***		-4.26 (1.02)	-6.25, -2.26	-0.16***		-1.73 (0.48)	-2.67, -0.79	-0.14***	
Religiously affiliated	1.28 (0.64)	-0.02, 2.47	0.06		-0.88 (0.90)	-2.64, 0.89	-0.03		0.75 (0.42)	-0.08, 1.58	0.06	
Annual household income	-0.00 (0.00)	0.00, 0.00	-0.02		-0.00 (0.00)	0.00, 0.00	0.00		0.00 (0.00)	0.00, 0.00	0.02	
Social desirability	-0.34 (0.06)	-0.46, -0.22	-0.18***		0.47 (0.09)	0.30, 0.64	0.18***		0.18 (0.04)	0.10, 0.26	0.15***	
<b>Step 2</b>				.094***				.169***				.044***
SIH	-0.25 (0.02)	-0.30, -0.20	-0.33***		0.44 (0.03)	0.38, 0.51	0.44***		0.11 (0.02)	0.07, 0.14	0.22***	

Note. Democrat and Republican were coded 1 if identifying with the party in question, 0 otherwise. Religious affiliation was coded as 1 = religious (including Christian, Hindu, Muslim, Jewish, Buddhist, and other religions) and 0 = not religious (including spiritual but not religious, agnostic, atheist, and none).

\* $p < .05$ . \*\* $p < .01$ . \*\*\* $p < .001$ .

Consistent with expectations, SIH was associated with less dislike/avoidance of political discussions (accounting for 4.1% of the variance). Also consistent with hypotheses, SIH was predictive of less political intolerance (19.4% of variance), more political tolerance toward the ideological group participants disagreed with most (4.3% of variance), less SDO (9.4% of variance), more social equality attitudes (16.9% of variance), and more social equality behavioral intentions (4.4% of variance).

## Sociopolitical Intellectual Humility Predicting Views of Someone Expressing a Political Opinion and Personal Opinion Change

We examined how SIH related to participants' perceptions of someone making an argument on a controversial political topic, the DREAM act, and whether SIH would relate to participants experiencing change in their own opinions on the topic based on exposure to another person's argument.

Participants rated items as described in the "Responses to Others' Opinions" subsection of the "Measures" section. We conducted three hierarchical linear regressions, one predicting positive adjectives of the person making the argument, one predicting negative adjectives of the person making the argument, and one predicting participants' opinion change. We centered all continuous control and predictor variables. In Step 1, we entered control variables (including education due to correlation with agreement with the pro-immigration statement,  $r = .10$ ,  $p = .01$ ). In Step 2, we entered participants' ratings of the importance of the topic of immigration to them and an indicator of attitude extremity (distance from the midpoint on initial agreement with the pro-DREAM Act statement). In Step 3, we entered participants' levels of agreement with the pro-DREAM Act statement. In Step 4, we entered the interaction term between levels of agreement with the pro-DREAM Act statement and importance placed on the issue of immigration. In Step 5, we entered SIH. In Step 6, we entered the interaction term between levels of agreement with the pro-DREAM Act statement and SIH. In Step 7, we entered a three-way interaction term between levels of agreement with the pro-DREAM Act statement, importance placed on the issue of immigration, and SIH. The results are displayed in Table 3 and Table 4. We followed procedures described by Aiken and West (1991) to conduct post-hoc probing of significant interactions.

### Positive Views

Agreement with the pro-DREAM Act statement was associated with more positive views of the person arguing to allow undocumented immigrants to remain in the U.S. The importance of the topic of immigration to the participants interacted with the extent to which participants agreed with the pro-DREAM Act statement in predicting positive views of the other person. As might be expected, probing this interaction indicated that for those who initially agreed with the pro-DREAM Act statement, placing greater importance on the topic of immigration was associated with more positive ratings of the person making an argument for allowing undocumented immigrants to remain in the U.S.,  $B = 0.84$ ,  $SE = 0.35$ , 95% CI [0.15, 1.53],  $\beta = 0.11$ ,  $t(797) = 2.39$ ,  $p = .02$ , whereas for those who initially disagreed with the pro-DREAM Act statement, placing greater importance on the topic of immigration was associated with less positive ratings of this person,  $B = -0.98$ ,  $SE = 0.45$ , 95% CI [-1.86, -0.10],  $\beta = -0.13$ ,  $t(797) = -2.19$ ,  $p = .03$ . Higher SIH was predictive of more positive views of the person arguing to allow undocumented immigrants to remain in the U.S., regardless of whether participants themselves agreed with the pro-DREAM Act statement.

### Negative Views

Agreement with the pro-DREAM Act statement was associated with less negative views of the person arguing to allow undocumented immigrants to remain in the U.S. This was not moderated by the degree of importance placed on the topic of immigration. Higher SIH was predictive of less negative views of the person arguing to allow undocumented immigrants to remain in the U.S., regardless of whether participants themselves agreed with the pro-DREAM Act statement.

Table 3

Hierarchical Regressions of Sociopolitical Intellectual Humility (SIH) Predicting Ratings of Others ( $N = 799$ )

Predictors	Positive ratings				Negative ratings			
	<i>B</i> (SE)	95% CI	$\beta$	$\Delta R^2$	<i>B</i> (SE)	95% CI	$\beta$	$\Delta R^2$
<b>Step 1</b>				.162***				.131***
Democrat	4.86 (0.67)	3.55, 6.18	0.27***		-1.67 (0.63)	-2.92, -0.43	-0.10**	
Republican	-3.46 (0.74)	-4.91, -2.00	-0.18***		4.81 (0.70)	3.44, 6.19	0.27***	
Annual household income	-0.00 (0.00)	0.00, 0.00	-0.00		-0.00 (0.00)	0.00, 0.00	-0.03	
Education	0.42 (0.33)	-0.22, 1.07	0.04		-0.15 (0.31)	-0.76, 0.47	-0.02	
Religiously affiliated	-0.82 (0.66)	-2.10, 0.47	-0.04		1.65 (0.62)	0.43, 2.87	0.09**	
Social desirability	0.16 (0.06)	0.03, 0.28	0.08*		-0.19 (0.06)	-0.30, -0.07	-0.10**	
<b>Step 2</b>				.012**				.047***
Attitude extremity	1.19 (0.36)	0.47, 1.90	0.11**		-1.26 (0.34)	-1.92, -0.60	-0.13***	
Importance of issue	-0.49 (0.27)	-1.01, 0.04	-0.06		1.59 (0.25)	1.10, 2.07	0.22***	
<b>Step 3</b>				.263***				.078***
Agreement with pro-immigration statement	3.24 (0.17)	2.91, 3.57	0.60***		-1.64 (0.18)	-2.00, -1.29	-0.33***	
<b>Step 4</b>				.010***				.004 <sup>a</sup>
Agreement x importance	0.46 (0.12)	0.22, 0.71	0.11***		-0.26 (0.13)	-0.52, 0.00	-0.07 <sup>a</sup>	
<b>Step 5</b>				.013***				.052***
SIH	0.10 (0.02)	0.05, 0.14	0.12***		-0.17 (0.02)	-0.22, -0.13	-0.24***	
<b>Step 6</b>				.001				.000
Agreement x SIH	-0.01 (0.01)	-0.04, 0.01	-0.03		-0.00 (0.01)	-0.03, 0.02	-0.01	
<b>Step 7</b>				.002				.002
Agreement x importance x SIH	-0.02 (0.01)	-0.04, 0.00	-0.05		-0.02 (0.01)	-0.04, 0.01	-0.05	

Note. Democrat and Republican were coded 1 if identifying with the party in question, 0 otherwise. Religious affiliation was coded as 1 = religious (including Christian, Hindu, Muslim, Jewish, Buddhist, and other religions) and 0 = not religious (including agnostic, atheist, spiritual but not religious, and none).

<sup>a</sup> $p = .053$ .

\* $p < .05$ . \*\* $p < .01$ . \*\*\* $p < .001$ .

## Opinion Change

Placing greater importance on the topic of immigration was associated with more opinion change after hearing another person's argument on this topic. Higher initial agreement with the pro-DREAM Act statement was associated with less opinion change after hearing another person's argument. This is unsurprising given those who already agreed with the pro-DREAM Act statement would have had less room to change in response to the argument in favor of allowing undocumented immigrants to remain in the U.S. Although there was no main effect for SIH on opinion change, probing the significant interaction between SIH and initial levels of agreement with the pro-DREAM Act statement indicated for those who initially agreed with the pro-DREAM Act statement, SIH was associated with greater increased agreement on the basis of hearing the other person's pro-immigration argument,  $B = 0.01$ ,  $SE = 0.00$ , 95% CI [0.00, 0.02],  $\beta = 0.18$ ,  $t(797) = 3.38$ ,  $p = .001$ . Among those who initially disagreed with the pro-DREAM Act statement, SIH was associated with *smaller* increases in agreement on the basis of hearing the other person's pro-immigration argument,  $B = -0.01$ ,  $SE = 0.00$ , 95% CI [-0.02, -0.00],  $\beta = -0.20$ ,  $t(797) = -2.73$ ,  $p = .01$ . These findings are displayed in Figure 1.

**Table 4***Hierarchical Regressions of Sociopolitical Intellectual Humility (SIH) Predicting Opinion Change (N = 799)*

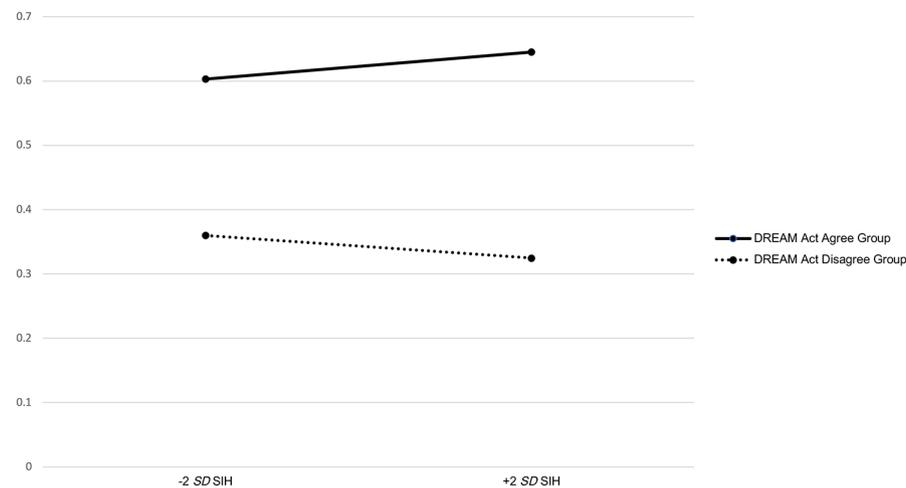
Predictors	Opinion Change			
	B (SE)	95% CI	$\beta$	$\Delta R^2$
<b>Step 1</b>				.004
Democrat	0.03 (0.05)	-0.07, 0.13	0.02	
Republican	-0.05 (0.06)	-0.16, 0.06	-0.04	
Annual household income	0.00 (0.00)	0.00, 0.00	0.02	
Education	-0.02 (0.03)	-0.07, 0.03	-0.03	
Religiously affiliated	-0.02 (0.05)	-0.12, 0.08	-0.02	
Social desirability	0.00 (0.01)	-0.01, 0.01	0.01	
<b>Step 2</b>				.009*
Attitude extremity	-0.04 (0.03)	-0.10, 0.01	-0.06	
Importance of issue	0.05 (0.02)	0.01, 0.09	0.10*	
<b>Step 3</b>				.031***
Agreement with pro-immigration statement	-0.08 (0.02)	-0.11, -0.05	-0.21***	
<b>Step 4</b>				.000
Agreement x importance	-0.01 (0.01)	-0.03, 0.02	-0.02	
<b>Step 5</b>				.002
SIH	0.00 (0.00)	-0.00, 0.01	0.05	
<b>Step 6</b>				.006*
Agreement x SIH	0.00 (0.00)	0.00, 0.01	0.08*	
<b>Step 7</b>				.000
Agreement x importance x SIH	0.00 (0.00)	-0.00, 0.00	0.00	

Note. Democrat and Republican were coded 1 if identifying with the party in question, 0 otherwise. Religious affiliation was coded as 1 = religious (including Christian, Hindu, Muslim, Jewish, Buddhist, and other religions) and 0 = not religious (including agnostic, atheist, spiritual but not religious, and none).

\* $p < .05$ . \*\* $p < .01$ . \*\*\* $p < .001$ .

**Figure 1**

*The Relationship Between SIH and Change in Agreement With a Pro-DREAM Act Statement for Those Who Initially Agreed and Disagreed With the Pro-DREAM Act Statement*



*Note.* The x-axis represents SIH from low (-2 SD) to high (+2 SD). The y-axis represents opinion change from before to after hearing a pro-immigration argument (second rating minus first rating). Zero represents no opinion change. On average, both groups increased in agreement with the pro-DREAM Act statement (reflected by positive y-axis values). Those who initially agreed with the pro-DREAM Act statement showed stronger increased agreement if they were higher compared to lower in SIH. For those who initially disagreed with the pro-DREAM Act statement, the amount of opinion change was tempered for those with higher compared to lower SIH.

## Discussion

Research has begun to demonstrate the relevance and potentially positive contribution of IH to the sociopolitical domain. We sought to examine IH about sociopolitical issues, replicating and expanding upon previous findings. Our analyses uncovered many of the expected links between SIH and political engagement, attitudes, and behavioral intentions.

First, we examined how SIH relates to engagement in political discussions. We hypothesized being more intellectually humble about sociopolitical issues may make it less threatening to engage in the inevitable disagreements of political discussion. Indeed, we found SIH was associated with less dislike/avoidance of political discussion. This must be interpreted with caution, given the dislike/avoidance of political discussion construct was based on *ad hoc* items rather than a validated scale. Nevertheless, this finding is consistent with previously observed links between IH and political interest/engagement (Krumrei-Mancuso & Newman, 2020; Porter & Schumann, 2018) and may allay concerns that SIH is reflective of political apathy or diffidence.

We repeatedly observed links between SIH and participants' attitudes toward others in society, even when factoring out variance attributable to important characteristics such as political identification, religiosity, income, and social desirability tendencies. Those with higher SIH were more politically tolerant of others, even of those they disagreed with most. In addition, they were less concerned about their own group's social dominance, believed more strongly in the equality of all people, and expressed greater intent to work toward social equality. SIH was a more robust negative predictor of general political intolerance (e.g., toward "people who disagree with me politically") and positive predictor of social equality attitudes (directed toward "all individuals and groups") compared to political tolerance toward the ideological group participants disagreed with most (e.g., white nationalists, radical Muslims, etc.) and intentions to engage in behaviors promoting social equality. Thus, SIH seemed to account for the least amount of variance in outcomes that may be most challenging to achieve. It is one thing to endorse respect for all people, and quite another to endorse tolerance toward a group whose ideologies one finds repugnant. Similarly, it's easier to endorse social action attitudes than to commit to specific social equality behaviors.

The difference in predictive utility of SIH across our regression analyses may also have related to discrepant specificity matching between SIH and the variety of outcomes examined. Poor specificity matching is common in humility research, most often taking the form of predicting specific outcomes from more general measures of humility (Hoyle & Krumrei-Mancuso, 2021). Thus, using more general statements to assess SIH may have underestimated the influence of SIH on more specific outcomes, such as attitudes toward a particular group or specific behaviors, because people may hold SIH in some contexts and not others.

Our findings demonstrated SIH is relevant not only to attitudes about groups, but also perceptions of individuals expressing political opinions. That is, compared to participants lower in SIH, participants higher in SIH held a person expressing an opinion on immigration (one of the most divisive and politically important issues of the day) in more positive and less negative regard, regardless of whether they agreed or disagreed with the opinion.

Future research may examine whether these links between SIH and increased tolerance and favorable views of others extend beyond attitudes to behaviors. For example, research may examine whether SIH is associated with more interpersonal interactions with or benevolence toward political or other outgroups, perhaps mediated by mechanisms observed in previous research (e.g., empathy or gratitude, Krumrei-Mancuso, 2017).

Finally, we examined links between SIH and opinion change. In the development of theories of IH, clear effort was made to distinguish IH from intellectual diffidence (e.g., Samuelson et al., 2015). Nevertheless, those newer to the topic of IH may question whether IH represents a lack of commitment or steadfastness in a viewpoint. If so, SIH may have

sinister implications for politics. If IH is associated with greater willingness to change one's mind, those high in IH could be open to political manipulation by the many actors who have incentives to shape public opinion. The current findings may allay, at least to some degree, fears that SIH is associated with being *too* open to opinion change. We found a small link between SIH and opinion change on the basis of being presented with another person's argument on the topic of immigration. SIH functioned differently among those who initially agreed and disagreed with DREAM Act sentiments. For those who initially agreed with a pro-DREAM Act statement, SIH was associated with increased agreement after reading another person's pro-immigration arguments. However, for those who initially disagreed with the pro-DREAM Act statement, SIH was associated with less increase in agreement on the basis of reading another person's pro-immigration arguments. SIH not being associated with being overly willing to change one's opinion on the basis of another person's arguments helps differentiate IH from intellectual diffidence. Further, controlling the importance of the topic to participants indicates SIH is not related to perspective change simply as a reflection of lack of caring about the issue. For those who initially agreed with the pro-DREAM Act statement, the argument provided was congenial, and thereby seemed to justify increased agreement among those higher in SIH. For those who initially disagreed with the pro-DREAM Act statement, the argument provided was uncongenial and therefore did not seem to justify as much belief revision among those higher in SIH. Overall, these findings suggest SIH involves openness to changing one's viewpoint *when warranted*, which may be a high bar for individuals high in IH, who have been shown to be attuned to the persuasiveness of arguments, seek out information, and think about issues deeply (Krumrei-Mancuso et al., 2020; Leary et al., 2017).

This raises a number of questions for future research. We explored opinion change in response to a brief, anonymous, argument without counterargument and found small effects for the role of SIH. Since the dynamics of political opinion change almost certainly vary by the strength of the argument, the presence of counterarguments, and the traits of the people making and receiving the argument (e.g., Chong & Druckman, 2007; Rodriguez et al., 2019), research can continue to examine SIH's role in attitude change in various contexts. Future research should examine the role of SIH in opinion change using a greater number and diversity of ideological stances and the provision of varying levels and strengths of evidence. For example, research should examine reactions to opposing statements, given that opinion change is unlikely to be symmetric.

## Limitations and Additional Future Directions

We believe SIH is relevant to individuals regardless of political ideology and that the current acrimonious state of public discourse exists, in part, because both sides of the political aisle struggle with IH. In this study, Republicans scored lower on SIH than Independents. When examining religiosity as a covariate, it accounted for some, but not all, of the link. Controlling party identification and religiosity helped to address this issue within the current analyses. Links between SIH and the outcomes of interest held true, regardless of participants' partisanship. Future research is needed to confirm whether a pattern exists between conservative political ideology and lower SIH, and if so, to explore potential underlying mechanisms. As discussed by Leary et al. (2017), conservative ideology is, by definition, less accepting of change than liberal ideology. Therefore, this could influence scores for (S)IH, depending on how it is assessed.

By assessing a specific, contextualized form of humility, SIH, we sidestepped some assumptions about the generalizability of humility across topics and forms of humility. Nevertheless, we were limited in assessing SIH only as a relatively enduring, self-reported trait – a trend in humility research, which has relied heavily on trait-level, self-report measurement (Hoyle & Krumrei-Mancuso, 2021). Original concerns about assessing humility through self-report (Davis, Worthington, & Hook, 2010; Rowatt et al., 2006; Tangney, 2000) have been somewhat attenuated (e.g., Davis & Hook, 2014; Worthington & Allison, 2018), based in part on support for the construct validity of self-reported humility (Ashton, Lee, & de Vries, 2014) and the fact that respondents have little incentive to fake their responses in anonymous or confidential, low-stakes research contexts such as the current study (de Vries et al., 2014). Nevertheless, given the limitations inherent to self-report methodology, a multi-method approach would be most desirable. Fortunately, other approaches are available and developing that consider additional sources of information about, and the presumed temporal stability of a person's humility (Hoyle & Krumrei-Mancuso, 2021). There are a number of informant report measures of humility/IH and rationales have been offered for the idea that humility might evidence properties of both

traits and states, suggesting the need to measure both stable and varying manifestations of humility (see Hoyle & Krumrei-Mancuso, 2021). Measures have been developed to assess humility as a state that varies across contexts and short periods of time (e.g., Chancellor & Lyubomirsky, 2013). There is a need to translate this work further into the domains of IH and SIH. Future research should also attend to potential interactions between trait levels of SIH and state influences, given that state factors (e.g., emotions) have been shown to strengthen/weaken or account for the influence of traits in politics (Brader, 2005; Marcus & MacKuen, 1993; Valentino, Hutchings, Banks, & Davis, 2008). Research has just begun to examine how cognitive and affective states can strengthen or weaken the impact of SIH on outcomes (Krumrei-Mancuso & Newman, 2020). Clearly, ongoing research is needed to examine potential moderators, underlying mechanisms, and possible causal relationships that may be at work in the current findings.

## Conclusions

A challenge in extending the study of IH into the socio-political domain is the possibility that sociopolitical phenomena of interest are conceptually related to aspects of IH, depending on how each is defined. For example, valuing diversity of thought (as an aspect of IH) would be expected to relate to support for the free speech rights of a group one finds distasteful (as a sociopolitical attitude). Ultimately, it is important to demonstrate empirically the hypothesized links between IH and the socio-political sphere, rather than assume they exist because of conceptual similarities. It is promising the current research showed the theoretically-related variables of SIH and sociopolitical outcomes were indeed statistically related, and that these findings held regardless of participants' political party identification or social desirability tendencies.

Previous research has shown IH is associated with a variety of positive outcomes for individuals. The current findings echo and expand on this, demonstrating SIH also holds positive benefits for society and politics. It seems holding a nonthreatening awareness of one's intellectual fallibility on sociopolitical topics and valuing diverse ways of thinking relate to people engaging in political back and forth without demanding their own group's dominance, denying basic rights to opposition groups, or thinking ill of people who articulate sociopolitical opinions. In addition, SIH seems to offer an openness to changing one's perspective when one deems this to be warranted, though not a general proclivity to changing one's attitude, alleviating concerns that those high in SIH may be swayed by virtually every appeal from politicians, parties, interest groups, or media personalities. Future research should focus on examining the processes underlying these associations and the potential directionality between these constructs. In today's often rude, vitriolic, and angry political discourse, people who are unthreatened by the limits to their thinking may be more willing to engage with others in healthy ways, by listening, seeking to understand, and generally lowering the level of acrimony.

---

**Funding:** This publication was supported by a subaward agreement (Agreement 145506) from the University of Connecticut with funds provided by Grant 58942 from John Templeton Foundation. Its contents are solely the responsibility of the authors and do not necessarily represent the official views of UConn or John Templeton Foundation.

---

**Competing Interests:** The authors have declared that no competing interests exist.

---

**Acknowledgments:** The authors have no support to report.

---

## Supplementary Materials

The Supplementary Materials contain an expanded version of Table 1 with detailed description of the study sample in comparison to the U.S. population (for access see [Index of Supplementary Materials](#) below).

### Index of Supplementary Materials

Krumrei-Mancuso, E. J., & Newman, B. (2021). *Supplementary materials to "Sociopolitical intellectual humility as a predictor of political attitudes and behavioral intentions"* [Additional information]. *PsychOpen*. <https://doi.org/10.23668/psycharchives.4460>

## References

- Abramowitz, A. I. (2010). *The disappearing center: Engaged citizens, polarization, and American democracy*. New Haven, NY, USA: Yale University Press.
- Abramowitz, A. I., & Webster, S. (2016). The rise of negative partisanship and the nationalization of U.S. elections in the 21st century. *Electoral Studies*, 41, 12-22. <https://doi.org/10.1016/j.electstud.2015.11.001>
- Aiken, L. S., & West, S. G. (1991). *Multiple regression: Testing and interpreting interactions*. Newbury Park, CA, USA: SAGE.
- American National Election Studies, University of Michigan, and Stanford University. (2017). *ANES 2016 Time Series Study*. Ann Arbor, MI, USA: Inter-university Consortium for Political and Social Research [distributor], 2017-09-19.
- Ashton, M. C., Lee, K., & de Vries, R. E. (2014). The HEXACO Honesty-Humility, agreeableness, and emotionality factors: A review of research and theory. *Personality and Social Psychology Review*, 18, 139-152. <https://doi.org/10.1177/1088868314523838>
- Bergh, R., Sidanius, J., & Sibley, C. G. (2015). Dimensions of social dominance: Their personality and socio-political correlates within a New Zealand probability sample. *New Zealand Journal of Psychology*, 44, 25-34.
- Brader, T. (2005). Striking a responsive chord: How political ads motivate and persuade voters by appealing to emotions. *American Journal of Political Science*, 49, 388-405. <https://doi.org/10.1111/j.0092-5853.2005.00130.x>
- Chancellor, J., & Lyubomirsky, S. (2013). Humble beginnings: Current trends, state perspectives, and hallmarks of humility. *Social and Personality Psychology Compass*, 7, 819-833. <https://doi.org/10.1111/spc3.12069>
- Chen, M. K., & Rohla, R. (2018). The effect of partisanship and political advertising on close family ties. *Science*, 360, 1020-1024. <https://doi.org/10.1126/science.aag1433>
- Chong, D., & Druckman, J. N. (2007). Framing public opinion in competitive democracies. *American Political Science Review*, 101, 637-655. <https://doi.org/10.1017/S0003055407070554>
- Davis, D. E., & Hook, J. N. (2014). Humility, religion, and spirituality: An endpiece. *Journal of Psychology and Theology*, 42, 111-117. <https://doi.org/10.1177/009164711404200112>
- Davis, D. E., Rice, K., McElroy, S., DeBlaere, C., Choe, E., Van Tongeren, D. R., & Hook, J. N. (2016). Distinguishing intellectual humility and general humility. *Journal of Positive Psychology*, 11, 215-224. <https://doi.org/10.1080/17439760.2015.1048818>
- Davis, D. E., Worthington, E. L., Jr., & Hook, J. N. (2010). Humility: Review of measurement strategies and conceptualization as personality judgment. *Journal of Positive Psychology*, 5, 243-252. <https://doi.org/10.1080/17439761003791672>
- Desimoni, M., & Leone, L. (2014). Openness to experience, honesty-humility and ideological attitudes: A fine-grained analysis. *Personality and Individual Differences*, 59, 116-119. <https://doi.org/10.1016/j.paid.2013.10.031>
- de Vries, R. E., Zettler, I., & Hilbig, B. E. (2014). Rethinking trait conceptions of social desirability scales: Impression management as an expression of honesty-humility. *Assessment*, 21, 286-299. <https://doi.org/10.1177/1073191113504619>
- Dunwoody, P. T., & Funke, F. (2016). The Aggression-Submission-Conventionalism Scale: Testing a new three factor measure of authoritarianism. *Journal of Social and Political Psychology*, 4, 571-600. <https://doi.org/10.5964/jspp.v4i2.168>
- Gallup. (2019). What do you think is the most important problem facing this country today? *Gallup Poll Social Series: World Affairs*. Retrieved from <https://news.gallup.com/poll/1675/most-important-problem.aspx>
- Gibson, J. L. (2013). Measuring political tolerance and general support for pro-civil liberties policies: Notes, evidence, and cautions. *Public Opinion Quarterly*, 77, 45-68. <https://doi.org/10.1093/poq/nfs073>
- Hays, R. D., Hayashi, T., & Stewart, A. L. (1989). A five-item measure of socially desirable response set. *Educational and Psychological Measurement*, 49, 629-636. <https://doi.org/10.1177/001316448904900315>
- Hook, J. N., Farrell, J. E., Johnson, K. A., Van Tongeren, D. R., Davis, D. E., & Aten, J. D. (2017). Intellectual humility and religious tolerance. *Journal of Positive Psychology*, 12, 29-35. <https://doi.org/10.1080/17439760.2016.1167937>
- Hopkin, C. R., Hoyle, R. H., & Toner, K. (2014). Intellectual humility and reactions to opinions about religious beliefs. *Journal of Psychology and Theology*, 42, 50-61. <https://doi.org/10.1177/009164711404200106>
- Hoyle, R. H., Davisson, E. K., Diebels, K. J., & Leary, M. R. (2016). Holding specific views with humility: Conceptualization and measurement of specific intellectual humility. *Personality and Individual Differences*, 97, 165-172. <https://doi.org/10.1016/j.paid.2016.03.043>
- Hoyle, R., & Krumeri-Mancuso, E. J. (2021). Psychological measurement of humility. In M. Alfano, M. P. Lynch, & A. Tanesini (Eds.), *The Routledge handbook of philosophy of humility* (pp. 387-400). New York, NY, USA: Routledge.

- Iyengar, S., Sood, G., & Lelkes, Y. (2012). Affect, not ideology: A social identity perspective on polarization. *Public Opinion Quarterly*, 76, 405-431. <https://doi.org/10.1093/poq/nfs038>
- Iyengar, S., & Westwood, S. (2015). Fear and loathing across party lines: New evidence on group polarization. *American Journal of Political Science*, 59, 690-707. <https://doi.org/10.1111/ajps.12152>
- Kahneman, D. (2011). *Thinking, fast and slow*. New York, NY, USA: Farrar, Straus and Giroux.
- Krumrei-Mancuso, E. J. (2017). Intellectual humility and prosocial values: Direct and mediated effects. *Journal of Positive Psychology*, 12, 13-28. <https://doi.org/10.1080/17439760.2016.1167938>
- Krumrei-Mancuso, E. J., Haggard, M. C., LaBouff, J. P., & Rowatt, W. C. (2020). Links between intellectual humility and acquiring knowledge. *Journal of Positive Psychology*, 15, 155-170. <https://doi.org/10.1080/17439760.2019.1579359>
- Krumrei-Mancuso, E. J., & Newman, B. (2020). Intellectual humility in the sociopolitical domain. *Self and Identity*, 19(8), 989-1016. <https://doi.org/10.1080/15298868.2020.1714711>
- Krumrei-Mancuso, E. J., & Rouse, S. V. (2016). The development and validation of the Comprehensive Intellectual Humility Scale. *Journal of Personality Assessment*, 98, 209-221. <https://doi.org/10.1080/00223891.2015.1068174>
- Leary, M. R., Diebels, K. J., Davisson, E. K., Jongman-Sereno, K. P., Isherwood, J. C., Raimi, K. T., . . . Hoyle, R. H. (2017). Cognitive and interpersonal features of intellectual humility. *Personality and Social Psychology Bulletin*, 43, 793-813. <https://doi.org/10.1177/0146167217697695>
- Lee, K., Ashton, M. C., Ogunfowora, B., Bourdage, J. S., & Shin, K.-H. (2010). The personality bases of socio-political attitudes: The role of Honesty–Humility and Openness to Experience. *Journal of Research in Personality*, 44, 115-119. <https://doi.org/10.1016/j.jrp.2009.08.007>
- Lee, K., Ashton, M. C., Wiltshire, J., Bourdage, J. S., Visser, B. A., & Gallucci, A. (2013). Sex, power, and money: Prediction from the Dark Triad and Honesty–Humility. *European Journal of Personality*, 27, 169-184. <https://doi.org/10.1002/per.1860>
- Leone, L., Chirumbolo, A., & Desimoni, M. (2012). The impact of the HEXACO personality model in predicting socio-political attitudes: The moderating role of interest in politics. *Personality and Individual Differences*, 52, 416-421. <https://doi.org/10.1016/j.paid.2011.10.049>
- Marcus, G. E., & MacKuen, M. B. (1993). Anxiety, enthusiasm and the vote: The emotional underpinnings of learning and involvement during presidential campaigns. *American Political Science Review*, 87, 672-685. <https://doi.org/10.2307/2938743>
- Mason, L. (2015). “I disrespectfully disagree”: The differential effects of partisan sorting on social and issue polarization. *American Journal of Political Science*, 59, 128-145. <https://doi.org/10.1111/ajps.12089>
- Mason, L., & Wronski, J. (2018). One tribe to bind them all: How our social group attachments strengthen partisanship. *Advances in Political Psychology*, 39, 257-277. <https://doi.org/10.1111/pops.12485>
- McElroy, S. E., Rice, K. G., Davis, D. E., Hook, J. N., Hill, P. C., Worthington, E. L., Jr., & Van Tongeren, D. R. (2014). Intellectual humility: Scale development and theoretical elaborations in the context of religious leadership. *Journal of Psychology and Theology*, 42, 19-30. <https://doi.org/10.1177/009164711404200103>
- Mutz, D. (2015). *In your face politics: The consequence of uncivil media*. Princeton, NJ, USA: Princeton University Press.
- Newport, F. (2018, July 18). Immigration surges to top of most important problem list. *Gallup*. Retrieved from <https://news.gallup.com/poll/237389/immigration-surges-top-important-problem-list.aspx>
- Owens, B. P., Rowatt, W. C., & Wilkins, A. L. (2012). Exploring the relevance and implications of humility in organizations. In G. M. Spreitzer & K. S. Cameron (Eds.), *Oxford handbook of positive organizational scholarship* (pp. 260–272). New York, NY, USA: Oxford University Press.
- Pew Research Center. (2016, June). *Partisanship and political animosity in 2016*. Retrieved from <http://www.people-press.org/2016/06/22/partisanship-and-political-animosity-in-2016>
- Pew Research Center. (2018, June). *Voters more focused on control of Congress – and the President – than in past midterms*. Retrieved from <http://www.people-press.org/2018/06/20/voters-more-focused-on-control-of-congress-and-the-president-than-in-past-midterms>
- Porter, T., & Schumann, K. (2018). Intellectual humility and openness to the opposing view. *Self and Identity*, 17(2), 139-162. <https://doi.org/10.1080/15298868.2017.1361861>
- Pratto, F., Çidam, A., Stewart, A. L., Zeineddine, F. B., Aranda, M., Aiello, A., . . . Henkel, K. E. (2013). Social dominance in context and in individuals: Contextual moderation of robust effects of social dominance orientation in 15 languages and 20 countries. *Social Psychological & Personality Science*, 4, 587-599. <https://doi.org/10.1177/1948550612473663>

- Rodriguez, D., Hook, J. N., Farrell, J. E., Mosher, D. K., Zhang, H., Van Tongeren, D. R., . . . Hill, P. C. (2019). Religious intellectual humility, attitude change, and closeness following religious disagreement. *Journal of Positive Psychology, 14*, 133-140. <https://doi.org/10.1080/17439760.2017.1388429>
- Rowatt, W. C., Powers, C., Targhetta, V., Comer, J., Kennedy, S., & Labouff, J. (2006). Development and initial validation of an implicit measure of humility relative to arrogance. *Journal of Positive Psychology, 1*, 198-211. <https://doi.org/10.1080/17439760600885671>
- Samuelson, P. L., & Church, I. M. (2015). When cognition turns vicious: Heuristics and biases in light of virtue epistemology. *Philosophical Psychology, 28*, 1095-1113. <https://doi.org/10.1080/09515089.2014.904197>
- Samuelson, P. L., Jarvinen, M. J., Paulus, T. B., Church, I. M., Hardy, S. A., & Barrett, J. L. (2015). Implicit theories of intellectual virtues and vices: A focus on intellectual humility. *Journal of Positive Psychology, 10*, 389-406. <https://doi.org/10.1080/17439760.2014.967802>
- Saucier, D. A., & Webster, R. J. (2010). Social vigilantism: Measuring individual differences belief superiority and resistance to persuasion. *Personality and Social Psychology Bulletin, 36*, 19-32. <https://doi.org/10.1177/0146167209346170>
- Sibley, C. G., Harding, J. F., Perry, R., Asbrock, F., & Duckitt, J. (2010). Personality and prejudice: Extension to the HEXACO personality model. *European Journal of Personality, 24*, 515-534. <https://doi.org/10.1002/per.750>
- Sobieraj, S., & Berry, J. M. (2011). From incivility to outrage: Political discourse in blogs, talk radio, and cable news. *Political Communication, 28*, 19-41. <https://doi.org/10.1080/10584609.2010.542360>
- Stanovich, K. E., & West, R. F. (1997). Reasoning independently of prior belief and individual differences in actively open-minded thinking. *Journal of Educational Psychology, 89*, 342-357. <https://doi.org/10.1037/0022-0663.89.2.342>
- Tangney, J. P. (2000). Humility: Theoretical perspectives, empirical findings and directions for future research. *Journal of Social and Clinical Psychology, 19*, 70-82. <https://doi.org/10.1521/jscp.2000.19.1.70>
- Torres-Harding, S. R., Siers, B., & Olson, B. D. (2012). Development and psychometric evaluation of the Social Justice Scale (SJS). *American Journal of Community Psychology, 50*, 77-88. <https://doi.org/10.1007/s10464-011-9478-2>
- U.S. Census Bureau. (2017a). *QuickFacts United States*. Retrieved from <https://www.census.gov/quickfacts/fact/table/US/PST045217>
- U.S. Census Bureau. (2017b). *United States Population Growth by Region*. Retrieved from [https://www.census.gov/popclock/data\\_tables.php?component=growth](https://www.census.gov/popclock/data_tables.php?component=growth)
- Valentino, N. A., Hutchings, V. L., Banks, A. J., & Davis, A. K. (2008). Is a worried citizen a good citizen? Emotions, political information seeking, and learning via the Internet. *Political Psychology, 29*, 247-273. <https://doi.org/10.1111/j.1467-9221.2008.00625.x>
- Van Tongeren, D. R., Stafford, J., Hook, J. N., Green, J. D., Davis, D. E., & Johnson, K. A. (2016). Humility attenuates negative attitudes and behaviors toward religious out-group members. *Journal of Positive Psychology, 11*, 199-208. <https://doi.org/10.1080/17439760.2015.1037861>
- Verba, S., Schlozman, K. L., & Brady, H. (1995). *Voice and equality: Civic voluntarism in American politics*. Cambridge, MA, USA: Harvard University Press.
- Whitcomb, D., Battaly, H., Baehr, J., & Howard-Snyder, D. (2017). Intellectual humility: Owning our limitations. *Philosophy and Phenomenological Research, 94*, 509-539. <https://doi.org/10.1111/phpr.12228>
- Worthington, E. L., Jr., & Allison, S. T. (2018). *Heroic humility: What the science of humility can say to people raised on self-focus*. Washington, DC, USA: American Psychological Association.
- Zhang, H., Farrell, J. E., Hook, J. N., Davis, D. E., Van Tongeren, D. R., & Johnson, K. A. (2015). Intellectual humility and forgiveness of religious conflict. *Journal of Psychology and Theology, 43*, 255-262. <https://doi.org/10.1177/009164711504300403>
- Zhang, H., Hook, J. N., Farrell, J. E., Mosher, D. K., Van Tongeren, D. R., & Davis, D. E. (2018). The effect of religious diversity on religious belonging and meaning: The role of intellectual humility. *Psychology of Religion and Spirituality, 10*, 72-78. <https://doi.org/10.1037/rel0000108>