Empirical Research Paper

Stepping Outside the Echo Chamber: Is Intellectual Humility Associated With Less Political Myside Bias?

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Abstract

In recent years, an upsurge of polarization has been a salient feature of political discourse in America. A small but growing body of research has examined the potential relevance of intellectual humility (IH) to political polarization. In the present investigation, we extend this work to political myside bias, testing the hypothesis that IH is associated with less bias in two community samples (N_1 = 498; N_2 = 477). In line with our expectations, measures of IH were negatively correlated with political myside bias across paradigms, political topics, and samples. These relations were robust to controlling for humility. We also examined ideological asymmetries in the relations between IH and political myside bias, finding that IH–bias relations were statistically equivalent in members of the political left and right. Notwithstanding important limitations and caveats, these data establish IH as one of a small handful psychological features known to predict less political myside bias.

Keywords

intellectual humility, partisan bias, polarization, humility, myside bias

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In recent decades, open-minded dialogue has been absent from much of U.S. politics. Dogmatism and cross-party antagonism increasingly characterize political discourse, as even a cursory glance at cable news or social media demonstrates. Partisans not only disagree with those who hold opposing political views but dislike or even loathe them for their views, a phenomenon known as *affective polarization* (Iyengar et al., 2019). Perhaps relatedly, people tend to evaluate, test, and generate evidence in support of one's beliefs and deny, dismiss, or distort evidence that disconfirms one's beliefs, a phenomenon largely referred to as *myside bias* (Stanovich et al., 2013). Myside bias is one of many potential variants of confirmation bias (Nickerson, 1998), and it manifests across belief domains, including politics. Such biased processing of evidence may hinder bipartisan initiatives, foster affective polarization, and fuel ideological discord.

Intellectual humility (IH) may be one fruitful path toward a more productive politics. IH reflects the propensity to reflect on the accuracy of one's beliefs and seek information impartially (Leary et al., 2017). Preliminary evidence suggests that IH may temper political extremism (Krumrei-Mancuso & Newman, 2020; Porter & Schumann, 2018), insofar as it is linked with open-mindedness and respect for others. Hence, IH may be particularly germane to less political myside bias (Hodge et al., 2020a). Nevertheless, to our knowledge, no studies have comprehensively examined the relations between IH and political myside bias.

IH

An intellectually humble individual is deliberative, carefully weighing evidence and monitoring whether he or she is jumping to conclusions based on faulty intuition. Indeed, some scholars maintain that IH is primarily metacognitive, reflecting peoples' internal thoughts and self-reflections about their beliefs (Leary et al., 2017); thus, IH may reflect the tendency to engage slow cognitive processing and check one's fast, intuitive processing when evaluating information (see Alfano et al., 2017). Other authors, however, also include interpersonal qualities in their conceptualizations of IH, such as an ability and willingness to engage with

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potentially disconfirmatory information without hostility and admit to one's cognitive limitations (Haggard et al., 2018; Krumrei-Mancuso & Rouse, 2016). These interpersonally imbued frameworks dovetail with the social-oil hypothesis of humility, which asserts that humility protects against relational wear and tear in situations of conflict (Van Tongeren et al., 2019).

Still others regard IH as a specific instantiation of *general humility* in the context of one's attitudes, beliefs, and values (McElroy et al., 2014; Van Tongeren et al., 2019). General humility reflects a decreased tendency to be manipulative and arrogant and an increased propensity to view oneself in an accurate light (Lee & Ashton, 2018; McElroy et al., 2019). One of the most widely used measures of humility is the Honesty–Humility subscale from *HEXACO Personality Inventory–Revised* (HEXACO PI-R; Lee & Ashton, 2018), which assesses four personality facets of an interpersonal nature: modesty, greed avoidance, sincerity, and fairness. Scholars still disagree whether and to what extent IH involves interpersonal properties or is purely a metacognitive construct (McElroy et al., 2019). Measuring general humility alongside IH can clarify the extent of overlap between the two. Although total scores on Honesty–Humility tend to manifest moderate to large positive correlations with scores on IH measures (Krumrei-Mancuso & Rouse, 2016; Porter & Schumann, 2018), IH statistically increments Honesty–Humility in predicting relevant external criteria, including affective polarization (Bowes et al., 2020) and open-mindedness (Davis et al., 2016), suggesting that IH predicts unique variance in outcomes of interest.

Many existing IH measures are decontextualized and domain-general, as IH is theorized to be dispositional (Krumrei-Mancuso & Rouse, 2016). Nevertheless, consistent with long-standing person–situation debates in personality psychology (see Epstein & O'Brien, 1985), IH may vary across situations or even belief domains (e.g., politics, religion, science). In essence, even those who score highly on measures of domain-general IH may hold views that they are unwilling to update, and consequently score low on certain domain-specific measures of IH (Hoyle et al., 2016). Hence, it is important to consider both domain-general IH and domain-specific IH when examining IH's relations with belief-related variables.

For instance, politics-specific IH was a significantly stronger correlate of less affective polarization than domain-general IH in a recent study (Bowes et al., 2020); these results raise the possibility that IH surrounding polarizing belief domains may be particularly important for lessening outgroup hostility. These results are consistent with a rich literature on the potential domain specificity of normal-range personality traits (Schulze et al., 2020). For example, the relationships between contextualized (domain-specific) personality traits (e.g., how open an individual is at work) and certain outcomes, such as academic performance and workplace satisfaction (Swift & Peterson, 2019), are more robust than the relationships between decontextualized personality traits (e.g., how open an individual is generally) and the same outcomes.

Political Myside Bias

Disconfirmatory information often gives rise to cognitive dissonance, an aversive motivational state propelling people to mitigate perceived threat and uncertainty (Elliot & Devine, 1994). In response, people may engage in motivated reasoning, the propensity to access, construct, and evaluate evidence to support their beliefs (Kunda, 1990). Due largely in part to processes such as motivated reasoning, individuals can engage in myside bias, especially when evaluating evidence related to one's cherished beliefs. Motivated reasoning and political myside bias can influence most stages of decision making, including the selection of information and the interpretation of information.

One manifestation of political myside bias is *partisan bias*, a phenomenon that reflects thinking or behaving in ways that align with one's political party, and it appears to be widespread among both Democrats and Republicans (Ditto et al., 2019). For example, partisans will often favor a given policy when informed that it was endorsed by their party but reject the same policy if informed that it was endorsed by the opposing party (Cohen, 2003). Partisan identity cues (e.g., political party membership) signal not only potential ideological differences but also potential affective, intellectual, and characterological differences (Iyengar et al., 2019). This conflation of partisan identity with affect and character bears significant implications for a host of decision-making processes (Iyengar & Westwood, 2015).

Moreover, many laboratory paradigms assess the biased selection of information, a process called *selective exposure*. Studies suggest that people are more likely to select belief-consistent than belief-inconsistent information (Hart et al., 2009). Indeed, Americans are increasingly sorting themselves into *echo chambers*, insulating themselves from dissenting opinions (cf. Dubois & Blank, 2018; Sunstein, 2018). Selective exposure is often especially pronounced in the political domain; for instance, selective exposure is related to political polarization, with ideological extremity predicting greater selective exposure, and vice versa (Stroud, 2010).

People's interpretation and evaluation of information are also susceptible to bias. *Biased assimilation* is the tendency to readily accept confirmatory evidence as true but dismiss disconfirmatory evidence as false (Lord et al., 1979). As a consequence of biased assimilation, people interpret new evidence to align with their preexisting beliefs and expectations, even if the evidence does not actually support them (Lord et al., 1979). Given that ambiguous evidence supports many interpretations that are difficult to falsify, biased assimilation is especially likely to occur when evidence is mixed or inconclusive (Anglin, 2019).

A Step Outside of the Echo Chamber: IH and Political Myside Bias

Researchers have advanced competing conceptualizations of IH that primarily differ in the degree to which they incorporate interpersonal features. As such, there is a common currency in the literature: IH comprises certain metacognitive characteristics, such as self-awareness, that facilitate an increased ability to form evidence-based decisions and reduce overconfidence. These core features may contribute to less bias in the pursuit of information and enhanced openness to the contributions of those who hold opposing views.

Consistent with these conjectures, both domain-general and politics-specific IH are associated with less affective polarization and same-party favoritism (Bowes et al., 2020; Krumrei-Mancuso & Newman, 2020), raising the possibility that IH is negatively related to political myside bias. Intellectually humble individuals may be less susceptible to same-party cues when evaluating information given that such individuals may be less affectively connected with same-party cues and more open-minded when faced with politically incongruent information (Nadelhoffer et al., 2020; Stanley et al., 2020). In addition, IH may temper ideological polarization and belief extremity; for instance, preliminary research indicates that politics-specific IH is negatively associated with political belief strength and certainty (Bowes et al., 2020) in addition to political commitment (Hodge et al., 2020a, 2020b). Nevertheless, research is mixed, as domain-general IH tends to be negligibly associated with political belief strength and certainty (Bowes et al., 2020).

In addition, Leary and colleagues (2017) examined the extent to which domain-general IH buffered against pejoratively characterizing a politician who changed his mind as a "flip-flopper" as opposed to someone who changed his stance following reflection. IH was related to more favorable characterizations of the political candidate and an increased willingness to vote for this candidate after changing his beliefs; nevertheless, these results were statistically significant only in Republicans. The authors interpreted this moderation effect as consistent with literature on the links between conservatism and inflexibility (Jost et al., 2003). Given that the sample sizes were small (67 Republicans, 71 Democrats), this interaction should be interpreted with caution.

IH may also be related to decreased selective exposure in the political domain, as individuals with high levels of domain-general IH are more likely than others to seek out political information that conflicts with their political views, even for contentious and personally meaningful issues (Porter & Schumann, 2018). On balance, Hodge et al. (2020a) found that politics-specific IH was related to identifying both positive features of a political opponent's perspective and negative features of one's own political perspective, even after controlling for political commitment. Politics-specific IH is also positively related to forgiving another individual for a political offense and statistically protects against political belief strength in predicting political forgiveness (Hodge et al., 2020b).

Current Study: Aims and Hypotheses

Although a handful of studies have investigated relations between IH and certain manifestations of political myside bias, the extent to which political myside bias is associated with domain-general and/or domain-specific IH remains unclear. Considering ongoing debates in the literature, we used measures of both domain-general IH (assessing one's level of IH in general) and domain-specific IH (assessing one's level of IH in the realm of politics specifically) to examine the robustness of IH–bias relations and whether certain conceptualizations of IH better predict political myside bias than others.

Aim 1: Characterize the Relations Between IH and Political Myside Bias

Based on research indicating that IH is associated with less affective polarization and decreased susceptibility to same-party cues when evaluating political information (Bowes et al., 2020; Leary et al., 2017; Stanley et al., 2020), we predicted that IH would be negatively associated with indices of political myside bias. In other words, we hypothesized that individuals higher in IH would exhibit less political myside bias across paradigms. We also predicted that individuals high in IH would have a more accurate view of their political knowledge and limitations, helping them to interact with political information in a balanced fashion as well as forgive others for perceived politically related transgressions (Hodge et al., 2020b). Given that only one study has statistically compared domain-specific and domain-general IH measures in their relations with political outcomes (e.g., affective polarization), our analyses comparing measures of IH in the prediction of partisan bias were exploratory. Based on previous research (Bowes et al., 2020), we tentatively conjectured that politics-specific IH would correlate more strongly and negatively with political myside bias than would domain-general IH.

Aim 2: Clarify the Relative Contribution of IH in Predicting Political Myside Bias

Research on IH and political myside bias has not included measures of humility, so it is unclear whether IH's associations with political myside bias are specific to IH as opposed to humility. Thus, we examined whether IH was significantly related to political myside bias after controlling for humility. We hypothesized that IH would account for significant variance in political myside bias after controlling for its shared variance with humility. In subsidiary analyses, we controlled

for political ideology and political conviction, given research finding that IH has correlated positively with liberal ideology (Krumrei-Mancuso & Newman, 2020) and negatively with political conviction (Bowes et al., 2020).

Method

Participants

Participants in both samples were recruited using Amazon's Mechanical Turk (MTurk), an online crowdsourcing platform through which community members participate in research studies. We recruited more than 400 participants in each sample to have 80% power to detect a medium effect size (i.e., $r = .20$; Gignac & Szodorai, 2016). To address potential data quality concerns, we used several methods for screening aberrant, illogical, and otherwise invalid responding (see Supplemental Material S1).

Sample 1. The final sample ($N = 498$; $M_{age} = 39.60$ years, $SD_{age} = 12.41$ years) was primarily female (55.8%), White (81.7%), and college educated (38.8%). The remainder of the sample was predominately African American (10.6%), Hispanic (5.2%), and Asian (4.4%). Most participants identified as Democratic (43.3%), followed by Republican (25.4%) and independent (23.1%).

Sample 2. Participants from Sample 1 were ineligible to enroll as participants again in Sample 2. The final sample ($N = 477$; $M_{age} = 39.68$ years, $SD_{age} = 11.54$ years) was primarily female (54.5%), White (74.4%), and college educated (36.9%). The remainder of the sample was primarily African American (15.9%), Hispanic (12.4%), and Asian (5.0%). Most participants identified as Democratic (40.7%), followed by Republican (29.8%) and independent (21.2%).

Procedure

Participants completed an online battery of self-report measures and partisan bias paradigms.[1] Intercorrelations and descriptive statistics are reported in Supplemental Tables S1 to S5. All measures are available in the online supplemental material. An overview of the dependent variables is provided in Table 1.

IH. Participants in both samples completed three self-report measures of IH: the *General Intellectual Humility Scale* (GIHS; Leary et al., 2017), *Comprehensive Intellectual Humility Scale* (CIHS; Krumrei-Mancuso & Rouse, 2016), and *Specific Intellectual Humility Scale* (SIHS; Hoyle et al., 2016). The GIHS is a six-item self-report measure of the intrapersonal aspects of IH that yields a composite score (αs in Samples 1 and 2 were .89 and .84, respectively). Participants rated their agreement with each item on a 1 (*strongly disagree*) to 5 (*strongly agree*) scale. The CIHS is a 22-item self-report scale that measures four dimensions: Openness to Revising One's Viewpoint, Independence of Intellect and Ego, Lack of Intellectual Overconfidence, and Respect for Others' Viewpoints (αs ranged from .83 and .90). Hierarchical factor analyses suggest that these four subdimensions load onto a general factor of IH (αs were .91 and .90; Krumrei-Mancuso & Rouse, 2016). Participants rated their agreement with each item on a 1 (*strongly disagree*) to 5 (*strongly agree*) scale. The SIHS is a nine-item self-report measure of IH in a specific domain. We assessed participants' IH in the domain of politics (αs were .92 and .90). Participants rated their agreement with each item on a 1 (*not at all like me*) to 5 (*very much like me*) scale.

To reduce the number of analyses conducted, we standardized and combined the CIHS and GIHS (*rs* were .61 and .71) to yield a composite of domain-general IH (αs were .94 and .92). We did not combine these measures with the SIHS, given that we were interested in elucidating potential differences in the correlates of domain-general versus domain-specific measures of IH. The correlations between each IH measure and partisan bias are presented in Supplemental Tables S6 to S9. Moreover, the correlations between the CIHS subdimensions and partisan bias are also presented in these tables.

Partisan bias. The partisan bias paradigms comprised two conditions (e.g., Republican and Democratic candidate). We used a within-subjects design, so all participants completed each condition. To minimize order effects, participants were randomly assigned to receive one version of each partisan bias paradigm first and the other second. In addition, to minimize carryover effects, the conditions were presented at different timepoints in the survey.[2]

Paradigms. In Samples 1 and 2, we adapted a measure from Leary and colleagues (2017) to assess bias in participants' perceptions of political flip-flopping. Participants read two passages describing a Democratic and Republican politician, respectively, with the two politicians matched on demographic characteristics and political experience (although demographic characteristics and experience were varied across samples). This paradigm will henceforth be referred to as the "Flip-Flopping Paradigm." To measure the extent to which participants were willing to forgive a politician for an error, we asked participants in Sample 1 to read two scenarios describing a presidential debate, wherein one of the candidates inadvertently makes a false statement concerning welfare policy. The candidate's political affiliation was varied across conditions, but candidates were matched on all other characteristics. This paradigm will henceforth be referred to as the "Forgiveness Paradigm."

Flip-flopping. Participants indicated the extent to which each candidate was flip-flopping to get elected (*absolutely not* to *absolutely*).

Table 1. Overview of Dependent Variables.

Paradigms	Sample item	Item response scale	Item interpretation
Partisan bias paradigms			
Flip-flopping[a]	Do you think the candidate is "flip-flopping" on the issue just to get elected?	1 (*absolutely not*) to 4 (*absolutely*)	Higher scores indicate perceiving the candidate as flip-flopping
Perceptions of the candidate[a]	Rate how moral the candidate is to you	1 (*not at all*) to 7 (*very much*)	Higher scores on each item indicate a more favorable perception of the candidate
Candidate weakness[a]	To what extent do you believe that it is a sign of weakness for a leader to admit that he or she was wrong in the past?	0 (*not at all*) to 100 (*extremely*)	Higher scores on each item indicate perceiving the candidate as more weak
Voting for candidate[a]	Would the fact that the candidate changed his mind about this issue (as described above) make you more likely or less likely to vote for him?	1 (*much less likely*) to 6 (*much more likely*)	Higher scores indicate being more likely to vote for the candidate
Forgiveness[a]	Do you think it is forgivable for a presidential candidate to make a mistake during a debate?	1 (*absolutely not*) to 5 (*absolutely*)	Higher scores indicate being more forgiving toward the candidate
Apologize to get elected[a]	Do you think the candidate apologized for his mistake just to get elected?	1 (*absolutely not*) to 4 (*absolutely*)	Higher scores indicate perceiving the candidate as apologizing to get elected
Embedded partisan cues			
Candidate selection	Which candidate did you select?	Arthur Wolfe (Republican) or Jeremy Smith (Democrat)	
Reasons for selection	To what extent did each of the following categories influence your decision to select the candidate you chose: academic achievement	0 (*did not influence me*) to 10 (*very much influenced me*)	Higher scores indicate being more influenced by the section on the résumé
Belief indices			
Global warming	Global warming is a human-made phenomenon	1 (*strongly disagree*) to 9 (*strongly agree*)	Higher scores indicate stronger belief in anthropogenic global warming
Gun control	Gun control laws reduce the rate of gun-related deaths	1 (*strongly disagree*) to 9 (*strongly agree*)	Higher scores indicate stronger support for stricter gun control legislation
Universal health care	Free health care is a right, not a privilege	1 (*strongly disagree*) to 9 (*strongly agree*)	Higher scores indicate stronger support for universal health care
Building a wall on U.S. border	Building a wall on the American border is worth the money it will cost.	1 (*strongly disagree*) to 9 (*strongly agree*)	Higher scores indicate stronger support for building a wall on the border
Biased assimilation			
Perceptions of the author[a]	Rate how arrogant the author is to you (R)	1 (*not at all*) to 9 (*very*)	Higher scores on each item indicate a more favorable perception of the author
Perceptions of the argument[a]	Rate how convincing you found the argument	1 (*not at all*) to 9 (*very*)	Higher scores on each item indicate a more favorable perception of the candidate
Openness[a]	Try to understand their perspective	1 (*strongly disagree*) to 9 (*strongly agree*)	Higher scores on each item indicate more openness
Respect[a]	This topic warrants different opinions and interpretations	1 (*strongly disagree*) to 9 (*strongly agree*)	Higher scores on each item indicate more respect
Selective exposure			
Supportive articles	How many articles did you select to read that supported your beliefs regarding universal health care?	Open-ended	—
Contradictory articles	How many articles did you select to read that contradicted your beliefs regarding universal health care?	Open-ended	—

[a]Denotes that we computed difference scores between the Republican candidate/proargument and Democratic candidate/antiargument. We examined the absolute value of these difference scores in relation to self-reported intellectual humility.

Perceptions of the candidate. Participants rated each candidate's positive attributes on a 1 (*not at all*) to 7 (*very much*) scale (e.g., extent to which candidate is intelligent, moral; interitem *r*s from .19 to .87); items were standardized and summed to yield a composite score (αs ranged from .93 to .96). In addition, in Sample 2, participants answered two questions on the Flip-Flopping Paradigm concerning whether leaders are weak for admitting to being wrong (*not at all* to *extremely*) and whether it is embarrassing when presidential candidates admit to being wrong (*not at all* to *extremely*); the latter two items were highly correlated and therefore combined (*r*s ranged from .74 to .86).

Likelihood of voting for the candidate. Participants indicated how likely they were to vote for the candidate (*much less likely* to *much more likely*).

Forgiveness. On the Forgiveness Paradigm in Sample 1, participants indicated whether it is forgivable for a presidential candidate to make a mistake during a debate (*absolutely not* to *absolutely*). In addition, in Sample 1 on the Forgiveness Paradigm, participants rated whether the candidate apologized to get elected (*absolutely not* to *absolutely*). In Sample 2, participants indicated on the Flip-Flopping Paradigm concerning whether it is forgivable for candidates to change their views (*absolutely not* to *absolutely*).

Difference scores. We computed the absolute value of the difference in ratings between the two candidates for perceptions of flip-flopping (Flip-Flop Bias), perceptions of the candidate (Candidate Bias), perceptions of weakness in the candidate (Weak Bias), likelihood of voting for the candidate (Voting Bias), willingness to forgive the candidate (Forgive Bias), and perceptions of the candidate as apologizing just to get elected (Elected Bias).

Embedded partisan cues. Participants in Sample 2 completed a measure of partisan bias adapted from Iyengar and Westwood (2015). Participants were instructed to read two individuals' résumés and choose one of the two to win a US$30,000 scholarship. The résumés comprised sections for academic achievement, community involvement, and extracurricular activities. One candidate was President of the Young Republicans, whereas the other was President of the Young Democrats; these activities were the only partisan cues on the résumés. Republican participants received résumés in which the Democratic scholarship candidate had a 4.0 grade point average (GPA), whereas the Republican candidate had a 3.5 GPA. Democratic participants received the opposite pattern of résumés. Upon making their selection, participants rated on a 0 (*did not influence me*) to 10 (*very much influenced me*) scale the extent to which each of the résumé categories influenced their decisions.

Biased assimilation. As with the partisan bias paradigms, the biased assimilation paradigms also comprised two conditions (e.g., pro- vs. antiargument). We employed the same design with these paradigms as with the partisan bias paradigms.[3] The response options for all items ranged from 1 (*strongly disagree*) to 9 (*strongly agree*). Participants rated the strength of their beliefs regarding two political issues, anthropogenic global warming and gun control, on a pair of six-item self-reports. Items were keyed such that higher levels of agreement indicated stronger belief in anthropogenic global warming and stricter gun control. To increase the likelihood that participants would engage in biased assimilation, participants were grouped into the topic, either global warming ($n_1 = 300$; $n_2 = 271$) or gun control ($n_1 = 263$; $n_2 = 199$), about which they felt most strongly (see Supplemental Material S2 for additional details).

Participants next read pro- and anti-issue passages, with the quality of evidence held constant across the two conditions; the only element that changed across the two conditions was whether that evidence was used to support or challenge the topic. After reading each passage, participants were asked about whether the author agreed or disagreed with the topic; as described earlier, this question served as an attention check. Participants were excluded from these analyses on a listwise basis if they did not pass both attention checks (Sample 1 *n*s were 37 [global warming] and 92 [gun control]; Sample 2 *n*s were 36 [gun control] and 73 [global warming]).

Perceptions of the author. Following procedures from Leary et al. (2017), we asked participants to provide ratings for the characteristics of each paragraph's author (e.g., likability, trustworthiness; interitem *r*s ranged from .05 to .88). Items were standardized and summed to yield a total score (αs ranged from .67 to .88).

Perceptions of the argument. Participants also provided ratings for the quality of each argument (e.g., objectivity, accuracy; inter-item *r*s ranged from .29 to .91). Items were standardized and summed to yield a total score (αs ranged from .67 to .88).

Openness and respect. Participants also completed two questionnaires, adapted from Porter and Schumann (2018), assessing participants' perceptions of each author's motivations for holding their articulated position (e.g., "they have unique experiences and areas of expertise that inform their argument"), with higher scores indicating greater respectfulness toward the author (αs ranged from .61 to .84), and participants' levels of openness toward each author's argument if given the opportunity to discuss the issue in person (e.g., "[I would] try to understand their perspective"), with higher scores indicating greater open-mindedness (αs ranged from .77 to .86).[4]

Difference scores. We computed the absolute value of the difference in ratings between the two conditions for perceptions toward the author (Author Bias), perceptions of the argument (Argument Bias), openness toward the author's perspective (Openness Bias), and respectful attributions (Respect Bias).

Selective exposure. Participants first rated the strength of their beliefs regarding universal health care and building a wall on the U.S.–Mexico border on a pair of six-item self-reports; each item was on a 1 (*strongly disagree*) to 9 (*strongly agree*) scale. Items were keyed such that higher levels of agreement indicated stronger support for universal health care and building a wall on the border. To increase the likelihood that participants would manifest selective exposure, participants were sorted into the topic about which they felt most strongly following the same procedures as for biased assimilation (universal health care $n_1 = 260$, $n_2 = 254$; building a wall $n_1 = 235$, $n_2 = 203$; see Supplemental Material S2).

Participants were then shown six news headlines (three protopic and three antitopic) and asked to select at least one article they would be interested in reading in full based on the headlines and subheadlines alone. Participants then indicated how many of their selected articles supported versus contradicted their beliefs in addition to the total number of articles they selected.[5]

Covariates

General personality. Participants in Sample 1 completed the 100-item version of HEXACO PI-R (Lee & Ashton, 2018), a self-report measure of general personality that uses a 1 (*strongly disagree*) to 5 (*strongly agree*) scale. In Sample 2, participants completed the 60-item version of the HEXACO PI-R (Ashton & Lee, 2009). The HEXACO measures 24 facet-level personality trait scales that converge on six domains: Honesty–Humility (αs were .87 and .80), Emotionality (αs were .86 and .80), Extraversion (αs were .90 and .84), Agreeableness (αs were .87 and .81), Conscientiousness (αs were .88 and .81), and Openness (αs were .94 and .92).

Political identity. Participants in both samples also indicated which political party they most closely identify with using a list of options (e.g., Republican, Democratic). In Sample 2, those who identified as independent (29.4% of total sample) were directed to a multiple-choice question: "Generally speaking, do you usually think of yourself as closer to a Republican or Democrat, if you had to choose?" Participants selected their answer from the following options: Republican (31.4%), Democrat (37.1%), could not choose either (31.4%). Participants in both samples also rated how generally liberal versus conservative they are using a 1 (*extremely liberal*) to 7 (*extremely conservative*) scale.

Political conviction. To assess political conviction, participants indicated "the strength of your political beliefs" on a 0 (*not at all strong*) to 100 (*extremely strong*) sliding scale.

Results

Raw data files are available in online supplemental material. Effect sizes were interpreted using Gignac and Szodorai's (2016) benchmarks for individual differences researchers. As noted in the "Method" section, we combined the CIHS and GIHS to reduce the number of analyses. Herein, we note the average difference between the two IH measures in terms of their relations with study outcomes and highlight where differences were equal to or exceeded .10 (small effect size per Gignac & Szodorai, 2016). In cases where the difference between correlations was equal to or exceeded .10 (five of 80 correlations, 6% of results), we conducted post hoc Steiger's tests of the difference between dependent correlations (Lee & Preacher, 2013).

Descriptive Statistics

Means and standard deviations are in Supplemental Table S5. There was evidence of moderate to large positive skew (skewness ranged from −1.18 [academic achievement ratings, Sample 2] to 3.34 [Universal Healthcare (UH) Contradicted, Sample 2]) and leptokurtosis (kurtosis ranged from −1.97 [candidate selection, Sample 2] to 18.74 [UH Contradicted, Sample 2]) for political myside bias (see online supplemental material for the full output). Thus, we log-transformed all bias indices in secondary analyses. The full log-transformed results are presented in Supplemental Tables S12 to S15. In the main text, we note when results changed after log-transforming.

Correlations Between IH and Study Covariates

In line with previous research (Hoyle et al., 2016), domain-general IH and politics-specific IH were strongly positively correlated (Table 2). Regarding Honesty–Humility, domain-general IH manifested moderate-to-large positive correlations whereas politics-specific IH was not significantly related to Honesty–Humility. The correlations between IH and other general personality traits are also in Table 2. Regarding ideology, domain-general IH was moderately associated and politics-specific IH was weakly associated with identifying as more liberal. Consistent with this result, both domain-general IH and politics-specific IH were weakly to moderately related to believing in anthropogenic climate change, supporting universal health care, and being less supportive of building a wall on the U.S.–Mexico border. Only politics-specific IH was significantly related to supporting stricter gun control legislation in Sample 2. Domain-general IH was not significantly related to political conviction. In contrast, politics-specific IH was consistently significantly

Table 2. Correlations Between Covariates and IH Measures.

	Domain-general IH		Politics-specific IH	
Measures	S1	S2	S1	S2
Politics-specific IH	**.57**	**.52**	—	—
Honesty–Humility	**.26**	**.33**	.03	.06
Emotionality	.02	−.02	.00	.10*
Extraversion	.06	**.17**	*−.13*	*−.14*
Agreeableness	**.33**	**.44**	.11*	**.17**
Conscientiousness	**.24**	**.40**	.02	−.02
Openness	**.34**	**.45**	.08	.12*
Political ideology	**−.22**	**−.20**	−.10*	−.10*
Political conviction	.03	.01	**−.29**	**−.22**
Global warming ideology	**.24**	**.23**	**.18**	**.26**
Gun control ideology	.09	.06	.03	*.13*
Build wall ideology	**−.26**	**−.26**	**−.18**	**−.18**
Universal health care ideology	**.25**	*.15*	*.15*	**.20**

Note. Bolded: $p < .001$; italicized: $p < .01$; and *$p < .05$. Higher scores on political ideology indicate identifying as more conservative as opposed to liberal. IH = intellectual humility.

Table 3. Associations Between Intellectual Humility and the (a) Flip-Flopping and (b) Forgiveness Paradigms.

	FF Vote Bias		FF Candidate Bias		FF Flip-Flop Bias[a]		FF Forgive Bias	FF Weak Bias	FOR Elected Bias	FOR Vote Bias	FOR Forgive Bias	FOR Candidate Bias
IH	S1	S2	S1	S2	S1	S2	S2	S2	S1	S1	S1	S1
DG IH	*−.15*	*−.13*	*−.15*	−.10*	*−.19*	−.12*	−.11*	**−.22**	**−.18**	**−.19**	*−.14*	**−.24**
SIHS	*−.14*	*−.15*	**−.17**	**−.23**[b]	−.22	−.08	−.04	**−.20**	**−.17**	**−.19**	−.02[c]	**−.27**

Note. Bolded: $p < .001$; italicized: $p < .01$; and *$p < .05$. All bias scores represent the absolute value of the difference between the Republican versus Democrat candidate. DG IH = domain-general intellectual humility; SIHS = Specific Intellectual Humility Scale–Politics; FF = Flip-Flopping Paradigm; FOR = Forgiveness Paradigm.

[a]Due to a computer error, only one condition was included in Sample 1. The FF Flip-Flopping Bias score is only for the Republican candidate presented first followed by the Democrat candidate. $N = 228$.

[b]Denotes that the correlation between the SIHS and flip-flopping/forgiveness was significantly larger than the correlation between DG IH and flip-flopping/forgiveness.

[c]Denotes that the correlation between the SIHS and flip-flopping/forgiveness was significantly smaller than the correlation between DG IH and flip-flopping/forgiveness.

related to less political conviction, and these results ranged from small to moderate.[6]

Aim 1: Relations Between IH and Political Myside Bias

Consistent with our hypotheses, IH tended to manifest small to medium negative correlations with political myside bias scores across samples. Negative correlations between IH and the bias scores indicate less bias: As scores on self-reported IH increase, there is a corresponding decrease in the discrepancy between ratings for one political party/argument over the other. In addition, to examine whether the magnitude of the correlations between IH and political myside bias differed significantly across measures of IH (domain-general vs. politics-specific), we conducted tests of dependent correlations.

IH and Partisan bias. Across paradigms, we found consistent evidence that IH measures were associated with less partisan bias, meaning that intellectually humble individuals provided similar ratings for the Republican and Democratic candidate (Table 3). The differences between the GIHS and CIHS were small in terms of their correlations with indices of partisan bias (average differences between correlations were .00 [Flip-Flopping Paradigm] and .04 [Forgiveness Paradigm]).[7,8]

Flip-Flopping Paradigm. Domain-general IH consistently manifested small to medium negative and significant correlations with the (a) Vote Bias score (e.g., likelihood of voting for candidate), (b) Candidate Bias score (e.g., positive perceptions of candidate's character), and (c) Flip-Flop Bias score (e.g., perceptions of whether candidate was flip-flopping). In Sample 2, domain-general IH was also weakly,

Table 4. Associations Between Intellectual Humility and the Résumé Selection Indices in Sample 2.

IH	Candidate selection	Community involvement	Extracurricular activities	Academic achievement
DG IH	**.20**	.09	−.01	**.24**
SIHS	**.28**	.06	−.06	**.27**

Note. Bolded: $p < .001$ and italicized: $p < .01$. DG IH = domain-general intellectual humility; SIHS = Specific Intellectual Humility Scale–Politics.

albeit significantly, negatively associated with the Forgive Bias score (e.g., willingness to forgive the candidate) and moderately negatively with the Weak Bias score (e.g., perceptions that it is weak and embarrassing to admit to a mistake as a candidate). Politics-specific IH also manifested small to medium negative and significant correlations with Vote Bias and Candidate Bias. In Sample 1, politics-specific IH was moderately and significantly negatively associated with Flip-Flop Bias, but the correlation was negligible in Sample 2. In Sample 2, politics-specific IH was not significantly associated with Forgive Bias but was moderately negatively correlated with Weak Bias.

Of six tests of dependent correlations across samples, only one was statistically significant (17%): The correlation between politics-specific IH and the Candidate Bias score in Sample 2 was significantly larger than was the correlation between domain-general IH and the Candidate Bias score, $Z(475) = 2.95$, $p < .01$. Moreover, the relation between the CIHS and Flip-Flopping Forgive Bias was significantly more negative than was the relation between the GIHS and Flip-Flopping Forgive Bias, $Z(4,750) = 2.89$, $p < .01$.

Forgiveness Paradigm. Consistent with the negative correlation between domain-general IH and the Forgive Bias score in the Flip-Flopping Paradigm in Sample 2, domain-general IH was weakly negatively associated with Forgive Bias in the Forgiveness Paradigm in Sample 1. Politics-specific IH, in contrast, was negligibly associated with Forgive Bias. Both domain-general IH and politics-specific IH manifested small to medium negative correlations with (a) Elected Bias (e.g., perception that candidate apologized to get elected), (b) Vote Bias, and (c) Candidate Bias that were significant.

Of four tests of dependent correlations, only one was significant (25%): The correlation between politics-specific IH and Forgive Bias was smaller than the correlation between domain-general IH and this outcome, $Z(497) = 2.90$, $p < .01$.

Political differences. In exploratory analyses, we examined whether political party (1 = Republican, 2 = Democratic) moderated the associations between IH and indices of partisan bias (22 analyses). To do so, we used the PROCESS macro in SPSS (Hayes, 2017). In Sample 1, there were no political differences in partisan bias across measures of IH.[9] In Sample 2, only one result was statistically significant: The relationship between politics-specific IH and the Forgive Bias Score in the Flip-Flopping Paradigm was significantly more negative in Republicans than in Democrats ($b = .03$, $SE = 0.01$, 95% confidence interval [CI] = [0.01, 0.05], $R^2 = .03$, $\Delta R^2 = .02$). Thus, we found little evidence for political asymmetry in the relations between IH and partisan bias.

IH and embedded partisan cues. Tests of independent correlations (Preacher, 2002) indicated that these correlations did not differ significantly between Republicans and Democrats (Zs ranged from −1.23 to 1.18, ps $> .05$). Thus, we collapsed across participants to examine the relations between IH and the scholarship candidate selection variables (but see Supplemental Table S11 for the correlations in Republicans and Democrats separately). The differences between the GIHS and CIHS were small in terms of their correlations with the scholarship selection paradigm variables (average differences between correlations was .04).

Domain-general IH manifested a medium positive correlation with selecting the more qualified candidate from the opposing political party (Table 4). Domain-general IH was not significantly associated with selecting the candidate based on his community involvement or extracurricular activities; instead, domain-general IH manifested a medium positive association with selecting the candidate based on his academic achievement, the variable that was manipulated across candidates. Politics-specific IH also manifested a large positive association with choosing the more qualified candidate from the opposing political party. Similar to domain-general IH, politics-specific IH was (a) negligibly associated with selecting the candidate based on his community involvement or extracurricular activities but (b) moderately positively associated with selecting the candidate based on his academic achievement.

Of four tests of dependent correlations across topics and samples, none were statistically significant (Zs ranged from 0.67 [community involvement] to 1.85 [candidate selection], dfs were 475, ps $> .05$).

IH and biased assimilation. Across topics and variables, we found consistent evidence that IH measures were associated with less biased assimilation, meaning that intellectually humble individuals provided similar ratings for characteristics surrounding the pro- and antiarguments. The correlations between IH and indices of biased assimilation are presented in Table 5. In subsidiary analyses, we collapsed across the

Table 5. Associations Between Intellectual Humility and Biased Assimilation Scores.

	Global warming (N_{S1} = 263, N_{S2} = 198)								Gun control (N_{S1} = 171, N_{S2} = 163)							
	Argument Bias		Author Bias		Openness Bias		Respect Bias		Argument Bias		Author Bias		Openness Bias		Respect Bias	
IH	S1	S2	S1	S2	S1	S2	S1	S2	S1	S2	S1	S2	S1	S2	S1	S2
DG IH	−.08	−.11	**−.22**	−.12	**−.38**	**−.38**	*−.21*	−.08	*−.26*	−.15	**−.34**	−.17*	**−.40**	**−.30**	**−.35**	*−.26*
SIHS	**−.26**[a]	**−.43**[a]	**−.34**[a]	**−.32**[a]	**−.44**	**−.47**	**−.29**	**−.26**[a]	**−.40**[a]	*−.24*[a]	**−.43**[a]	**−.28**[a]	**−.44**	**−.31**	**−.40**	**−.34**

Note. Bolded: $p < .001$; italicized: $p < .01$; and *$p < .05$. All bias scores represent the absolute value of the difference between the pro- and antiarguments. Participants were sorted into the two conditions based on overall belief strength. Participants who did not pass the argument evaluation attention checks were excluded from these analyses on a listwise basis. DG IH = domain-general intellectual humility; SIHS = Specific Intellectual Humility Scale–Politics.

[a]Denotes that the correlation between the SIHS and biased assimilation was significantly larger than the correlation between DG IH and biased assimilation.

topics, and these results are presented in Supplemental Table S20. The differences between the GIHS and CIHS were small in terms of their correlations with indices of biased assimilation were small (average difference between correlations was .02).

Across topics (i.e., global warming and gun control) and samples, domain-general IH manifested small to medium negative correlations with Argument Bias (e.g., favorable ratings of the quality of the argument), although only the correlation between domain-general IH and the Gun Control Argument Bias Score in Sample 1 was significant. Furthermore, domain-general IH was weakly to moderately negatively correlated with Author Bias (e.g., positive ratings of the characteristics of the author); the correlation between domain-general IH and the Global Warming Author Bias score in Sample 2, however, was negligible. Domain-general IH also manifested moderate to large negative correlations with Openness Bias (e.g., openness to the author's views) that were statistically significant. The correlations between domain-general IH and Respect Bias (e.g., respect for the author's views) varied in their magnitude across topic; in the global warming topic, domain-general IH manifested negligible to small negative correlations with Respect Bias, but for the gun control topic, domain-general IH manifested moderate to large negative correlations with Respect Bias. In contrast with domain-general IH, politics-specific IH consistently manifested medium to large and significant negative correlations with all bias scores across the two topics and samples.

After log-transforming these indices of biased assimilation, the relations between domain-general IH and (a) Argument Bias–gun control in Sample 1 and (b) Author Bias–gun control in Sample 2 were reduced to nonsignificance (Supplemental Table S12). In addition, of 16 tests of dependent correlations across topics and samples, nine were statistically significant (56.3%), with all nine indicating that the correlations between politics-specific IH and biased assimilation were significantly larger (*Z*s ranged from 2.05 [Sample 2, global warming Author Bias score] to 4.62 [Sample 2, global warming Author Bias score], *df*s ranged from 161 to 263, *p*s $< .05$). In addition, the relation between the CIHS and Respect Bias across conditions was significantly more negative than the relation between the GIHS and Respect Bias (*Z*s were 1.84 [global warming] and 3.07 [gun control], *df*s were 161 and 196, *p*s $< .05$).

IH and selective exposure. Across topics and variables, we found evidence that IH measures were weakly associated with less selective exposure, as IH measures were related to selecting fewer supportive articles and more contradictory articles relative to the total number of articles (Table 6). In subsidiary analyses, we collapsed across topics, and these results are in Supplemental Table S20. The differences between the GIHS and CIHS were small in terms of their correlations with indices of selective exposure (average difference between correlations was .07).

To account for individual differences in the total number of articles selected, we regressed (in independent models) the number of articles selected that supported participants' beliefs and contradicted participants' beliefs on the total number of articles selected; the standardized residuals were saved to yield a Support Residual and Contradict Residual. Domain-general IH was consistently negatively associated with the Support Residual; the correlation between domain-general IH and the Universal Health Care Support Residual in Sample 1, however, was negligible. In contrast, domain-general IH was not significantly associated with the Contradict Residual scores, although all correlations were positive. Similar to domain-general IH, politics-specific IH also manifested small to medium negative correlations with the Support Residual across topics; again, the correlation with the Universal Health Care Support Residual in Sample 1 was not statistically significant. In Sample 1, politics-specific IH was negligibly, albeit still positively, associated with the Contradict Residual scores. In Sample 2, politics-specific IH was significantly positively associated with the Contradict Residual scores, although the correlations were small.

Table 6. Associations Between Intellectual Humility and the Selective Exposure Indices.

	Build wall (N_{S1} = 235; N_{S2} = 203)				Universal health care (N_{S1} = 260; N_{S2} = 254)			
	Support residual		Contradict residual		Support residual		Contradict residual	
IH	S1	S2	S1	S2	S1	S2	S1	S2
DG IH	−.16*	**−.25**	.07	.07	−.12	*−.17*	.03	.01
SIHS	−.17*	**−.30**	.11	.17*[a]	−.12	−.15*	.08	.16*[a]

Note. Bolded: $p < .001$; italicized: $p < .01$; and *$p < .05$. Total number of selected articles was controlled for in these analyses, and the standardized residual was saved. DG IH = domain-general intellectual humility; SIHS = Specific Intellectual Humility Scale–Politics.
[a]Denotes that the correlation between the SIHS and selective exposure was significantly larger than the correlation between DG IH and selective exposure.

Of eight tests of dependent correlations across topics and samples, two were statistically significant (25%): The correlations between politics-specific IH and the Contradict Residual scores in Sample 2 were significantly larger than the correlations between domain-general IH and these scores (*Z*s were from 2.25 [Build Wall Contradict Residual] and 3.36 [Universal Health Care Contradict Residual], *df*s ranged from 201 to 261, *p*s $< .05$). In addition, the relation between the GIHS and the Contradict Residual across conditions was significantly more positive than the relation between the CIHS and the Contradict Residual (*Z*s were 3.74 [global warming, gun control], *df*s were 201 and 252, *p*s $< .001$).

Aim 2: Specificity of the Associations Between IH and Partisan Bias

To address the extent to which these associations were specific to IH, we examined whether IH statistically predicted indices of partisan bias after controlling for its shared variance with (a) Honesty–Humility, (b) political ideology, and (c) political conviction.[10] Given the number of analyses conducted, we summarize the broad patterns of results (see Supplemental Material S4 for a full description). In aggregate, IH–bias relations did not significantly change after covarying for Honesty–Humility (2.5% of results were reduced to nonsignificance and 5% of results gained significance), political ideology (5% of results were reduced to nonsignificance and 2.5% of results gained statistical significance), or political conviction (6% of results were reduced to nonsignificance and 5% of results gained significance).

Discussion

IH manifested negative, although typically small, relations with political myside bias across measures and samples, even for issues that participants held with great conviction. These results suggest that IH may lessen the influence of partisan cues on decision-making processes, although future research leveraging longitudinal designs is needed to corroborate these interpretations. The majority of these correlations (70%) replicated across samples in terms of their statistical significance, and all results replicated in terms of the direction of the correlations.

In addition, covarying for Honesty–Humility and political conviction tended to not significantly alter the relations between IH and political myside bias, indicating that these associations were relatively specific to IH. There was also consistent evidence for political symmetry in the relations between IH and political myside bias, as the associations did not significantly differ across Republicans and Democrats. Even though IH was associated with liberal ideology, controlling for political ideology did not significantly alter IH–bias relations.

There was some evidence for a suppressor effect when covarying for Honesty–Humility, meaning the regression coefficient for the relation between IH and political myside bias became larger after accounting for IH's shared variance with Honesty–Humility. These results may indicate that the metacognitive aspects of IH may be more robust predictors of less political myside bias than humility at large. Nevertheless, none of these effects replicated across samples, a common occurrence with suppressor effects in psychological science (see Watson et al., 2013), and we are cautious to overinterpret these results.

IH was related to less partisan bias in the Flip-Flopping and Forgiveness paradigms. These results, however, tended to be small and in some cases nonsignificant. It is possible that issues surrounding internal consistency reliability may have influenced IH–bias relations, as difference score measures often suffer in terms of their internal consistency reliabilities (Shanock et al., 2010). Nevertheless, internal consistency estimates exceeded recommended cutoffs for adequate reliability in the present investigation (e.g., $>.70$; see Taber, 2018) in most cases (92%). Thus, the "true" effects may be small, and IH may be a relatively weak negative correlate of these measures of partisan bias. Future research is needed to clarify the robustness of these relations and potential boundaries on them. For instance, these paradigms referred to a vague description of a political candidate. Consistent with research on reference group effects in cross-cultural studies (Heine et al., 2002), differences in mental representations of political candidates may bear on

the relations between IH and partisan bias. Still, our results conceptually replicate results from previous studies examining political forgiveness and perceptions of flip-flopping (Hodge et al., 2020a; Leary et al., 2017).

Moreover, IH was related to less political myside bias even when partisan cues were embedded in a nonpolitical decision-making paradigm (i.e., choosing a scholarship winner), and these results were consistent across political party. Our findings may indicate that IH may constrain the diffuse spread of partisan identity in peoples' day-to-day lives. In addition, IH was related to choosing the scholarship candidate based on academic achievement rather than community and extracurricular involvement. Academic achievement was the most compelling indicator of candidate qualification in this paradigm, as it was the only variable that was meaningfully altered across the two résumés. Our results are consistent with studies finding that IH is related to enhanced metacognitive abilities (Krumrei-Mancuso et al., 2020b).

IH was also consistently significantly associated with less biased assimilation concerning one's openness to discussing the argument with the author, and these relations were large across samples and measures. Moreover, IH tended to be moderately associated with less biased assimilation concerning perceptions of the author's attributes and respect for the author's position. In contrast, IH was less consistently related to biased assimilation regarding the argument, particularly concerning the global warming arguments. Given that there is considerable scientific consensus concerning anthropogenic global warming, it is possible that intellectually humble individuals preferred arguments supported by science. Indeed, IH was weakly and positively related to believing in anthropogenic global warming. As such, these results are potentially consistent with frameworks advancing that political "bias" is not always irrational, as some beliefs are more scientifically sound than others (Baron & Jost, 2019).

We found that IH may lessen selective exposure, as it was weakly to moderately negatively associated with selecting articles that support one's preexisting views. IH was weakly positively associated with selecting articles that contradict one's preexisting views, although most of these correlations were nonsignificant. These results conflict somewhat with those of Porter and Schumann (2018): They found that IH was moderately positively related to selecting disconfirmatory political information. Although the reasons for this discrepancy across studies are unclear, there may be boundary conditions on the relation between IH and the selection of disconfirmatory political information. For instance, we assessed different topics than Porter and Schumann (2018), and we used different measures of IH. Future research is needed to clarify the generalizability of our results across measures of IH and political topics.

In addition, politics-specific IH often manifested relations with political myside bias that were significantly larger than domain-general IH. These results are consistent with studies examining the relations between indices of IH and affective polarization (Bowes et al., 2020; Nadelhoffer et al., 2020). Politics-specific IH may be especially important for fairly evaluating one's political beliefs, even those held with great conviction, as it may buffer against undue political certainty (Hoyle et al., 2016). Existing research and results from the present study indicate that domain-specific IH tends to decrease as belief certainty in that domain increases. Such results may suggest that individuals who are intellectually humble about their political beliefs can accurately assess the evidentiary support for their political views, justifiably contributing to less political certainty.

It is also possible, however, that politics-specific IH at least partially reflects low political conviction, which may raise questions regarding the construct validity of domain-specific IH. Scholars contend that IH should be distinct from diffidence or apathy, as IH reflects how people *interact* with their beliefs as opposed to how *strongly* they feel about their beliefs (Alfano et al., 2018; Krumrei-Mancuso & Rouse, 2016). Nevertheless, research in this area is mixed, as some studies indicate that politics-specific IH is related to *more* interest in following politics and *less* dislike of political discussion (Krumrei-Mancuso & Newman, 2020). Additional research is needed to clarify the extent to which politics-specific IH is imbued with diffidence.

Limitations and Future Directions

Although the current study is one of the most comprehensive examinations of IH and political myside bias to date, it was characterized by limitations that merit consideration in future research. First, our study was cross sectional, precluding formal conclusions regarding temporal precedence, let alone causality, in the relations between IH and political myside bias. Research examining the development of IH and political myside bias is needed. Rodriguez et al. (2017), for example, examined the trajectories of political media consumption over a period of 12 years, affording the opportunity to examine the developmental trends of selective exposure. Such research could be conducted in conjunction with measures of IH to ascertain whether IH reduces selective exposure and vice versa. Perhaps individuals who score low on IH and high on partisanship would manifest the most pronounced increases in partisan selective exposure.

Our study represents a preliminary step along the larger path of exploring causality, and, as such, future research is needed to clarify the cognitive and affective mechanisms that may bear on the relations between IH and political myside bias. Such research may inform studies aiming to employ bias mitigation strategies in political discourse. For instance, IH may directly reduce political myside bias, and this possibility warrants consideration. In addition to or in lieu of this possibility, IH may reduce political myside bias indirectly via still unspecified mediators, such as empathy or negative emotions such as anger. For instance, one compelling mechanism by which IH may reduce political myside bias is by

decreasing negative emotions, such as anger, experienced when faced with potentially disconfirming political information (Hodge et al., 2020a; Suhay & Erisen, 2018). IH may contribute to a greater appreciation for nuanced arguments and perhaps lower anger in the face of opposing views (Haggard et al., 2018; Hoyle et al., 2016).

This article reports the findings of preliminary studies exploring the nomological network of IH in political contexts. Future research could draw upon these findings to develop theories about the nature of IH relative to politics, test these within longitudinal or experimental paradigms, and utilize structural equation modeling to establish a measurement model of various self-report measures of IH. This could help account for potential nonnormality in distributions of IH and simultaneously account for the relations among IH indicators, which were robustly positively associated in the present studies.

Moreover, many paradigmatic designs of political myside bias, including those used in the present study, are potentially confounded with a priori political beliefs, accuracy motivations, perceived source trustworthiness, political engagement, and other processes/constructs relevant to political decision making (Tappin et al., 2020). As such, it is challenging to establish that politically motivated reasoning *causes* same-party favoritism and the selection of politically congenial information on these paradigms over and above other related processes. Given that IH may predispose to holding certain political views (e.g., support for views surrounding anthropogenic climate change), which in turn may affect political reasoning largely independent of politically motivated reasoning, future research is needed to clarify the decision-making mechanisms by which IH reduces political myside bias. For instance, IH may reduce political myside bias vis-à-vis reducing politically motivated reasoning, but it may additionally or separately reduce political myside bias vis-à-vis enhancing accuracy motivations. Consistent with the notion of decreasing reliance on paradigmatic measures of political myside bias, research is also needed to examine whether these findings generalize to more ecologically valid paradigms, such as the types and frequency of political social media postings (Simchon et al., 2020).

In addition, we primarily utilized a within-subjects rather than a between-subjects design to assess political myside bias. Although a within-subjects design possesses several advantages over a between-subjects design, including greater statistical power, it comes with several disadvantages (Leary, 2017). Political myside bias, for instance, is attenuated when using a within-subjects compared with a between-subjects design (Crawford et al., 2015). Sensitization may contribute to this attenuation in effect sizes, as participants may infer the purpose of the study and subsequently be motivated to reduce their biases. Independent replication efforts are warranted using multiple methodological approaches, including between-subjects designs, to elucidate the robustness of these relations.

Conclusion

Our results provisionally indicate that IH is related to less political myside bias across paradigms, political topics, and samples. Even when political beliefs were held with great conviction, IH was associated with less political myside bias and same-party favoritism. Research is needed to investigate whether IH can be increased, as least in the short term, to reduce political myside bias. Such research could also clarify whether increases in domain-general IH, politics-specific IH, or both are sufficient for mitigating against political myside bias. Our results are consistent with a burgeoning literature on the links between IH and religious tolerance (Hook et al., 2017). Our findings, thus, may bear implications for religious myside bias; we encourage researchers to investigate whether our findings generalize to other domains of bias and ideological extremism.

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Supplemental Material

Supplemental material for this article is available online.

Notes

1. Other individual differences measures (e.g., affective polarization) were included in this dataset, but they were not analyzed as a part of this study and are being used in ongoing research.
2. There was no evidence that the difference scores significantly differed across order of presentation according to mixed-effects analyses of variance (ANOVAs). Refer to Supplemental Material S5 for an overview of these analyses.
3. There was no evidence that the difference scores significantly differed across order of presentation according to mixed-effects ANOVAs. Refer to Supplemental Material S5 for an overview of these analyses.
4. Two items were removed from the openness composite, as reliability analyses indicated that the item total correlations were negative. In addition, one item was removed from the respect composite for the same reason. For the correlations between the composites including all items, see Supplemental Table S10.
5. Participants also indicated why they selected their chosen article(s). We elected to examine the correlations between Intellectual Humility (IH) and each individual motivation item in subsidiary analyses (see Supplemental Tables S16–S19 and Supplemental Material S6).

6. The correlations between HEXACO dimensions and other covariates (e.g., political ideology) are provided in Supplemental Table S25. See Supplemental Tables S21 to S24 for the zero-order correlations between covariates and indices of political myside bias.
7. In subsidiary analyses, we examined the correlations between IH and the partisan bias paradigms in self-identified Republicans and Democrats only. In Sample 1, none of the correlations between IH and partisan bias indices changed in terms of statistical significance. In Sample 2, just three out of 10 correlations between IH and partisan bias indices were reduced to nonsignificance. Hence, to maximize statistical power, we retained all participants in our analyses.
8. We also examined the correlations between IH and indices of political myside bias wherein we did not take the absolute value of the difference between Republican and Democratic candidates (Supplemental Tables S28 and S29). Hence, the direction of the correlation indicated whether IH was related to favoring one candidate over another (Supplemental Material S7). Collectively, there was little evidence that IH was related to favoring one candidate over another; where there was evidence that IH was related to favoring one candidate over another, it was related to favoring the political outgroup candidate over the ingroup candidate.
9. We excluded the Flip-Flop Bias Score in Sample 1, as it was only administered to 228 participants due to a computer error. Sample sizes for Republicans and Democrats would have been too small to meaningfully interpret.
10. We additionally controlled for intelligence, science literacy, and demographic variables in the relations between IH and political myside bias. These results are presented in Supplemental Material S3 and S4. A full breakdown of the demographic variables is in Supplemental Table S26, and the correlations between IH and demographic variables is in Supplemental Table S27.

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