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Intellectual Humility and Political Partisanship: Examining Individual Difference Correlates of Affective Polarization

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Abstract

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Affective polarization refers to negative feelings held among voters in each party toward members of
the opposing party and negative feelings toward opposing partisan information. It presents a problem,
as it has permeated every level of American politics and rendered it more difficult to achieve bipartisan
consensus on crucial policy issues. The present study examined whether intellectual humility buffered
against affective polarization as well as other measures of negative partisanship and political identity. A
sample of 526 American adults were recruited through Amazon's Mechanical Turk service and
administered an online survey. Intellectual humility was measured using four scales, Leary's Intellectual
Humility Scale, the Comprehensive Intellectual Humility Scale, and two Specific Intellectual Humility
Scales for the domains of religion and politics, respectively. Affective polarization was measured using
feeling thermometers that gauged the levels of anger, disgust, and contempt, and feelings of disgust
participants had towards members of the opposing party, as well as those same feelings in reaction to
the thought that of a member of their close family marrying a member of the opposing party. Measures
of political belief, party identification, political knowledge, and ideological constraint were gathered.
Finally, levels of partisan forgiveness were measured using a short vignette followed by questions.
Results were analyzed using correlations, hierarchical regressions, and factor analyses. As predicted,
higher levels of intellectual humility were associated with lower levels of affective polarization, non-
significantly to political belief certainty and strength, and associated with higher levels of partisan
forgiveness.

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Intellectual Humility and Political Partisanship: Examining Individual Difference Correlates of

Affective Polarization

Over the past two decades, the number of Americans who hold a mix of liberal and

conservative views has declined steadily (Abramowitz & Saunders, 2008; McCarty et al., 2006;

Neal, 2018). Data from the American National Election Survey (ANES) found that on an 11-

point ideology scale, 56% of Democrats were on the liberal side (scores of 1-5) as compared

with 12% of Republicans, while 73% of Republicans were conservative side (scores of 7-11)

compared with 21% of Democrats (Abramowitz & Saunders, 2008). This finding is supported by

evidence from Pew Research center that found the difference between total scores on a

questionnaire of ten political values is now 36 percentage points between Democrats and

Republicans (Pew Research Center, 2017). Although this increase is small compared with 2015

when the gap was 33 points, it represents a significant change from just two decades ago, in

1994, when the gaps was 15 points (Pew Research Center, 2017).

Political Polarization. The question in the literature is no longer whether polarization is

occurring, but what consequences it holds for the American electorate and for the tenor of

political discourse. Political science literature has examined the potential causes of this political

polarization and found that partisan divides exist not only at the elite level, among the most

politically educated and engaged population, but also among the electorate as a whole

(Abramowitz & Fiorina, 2013). This polarization is made up of two reciprocal components

(Bougher, 2017). The first is ideological polarization, which concerns polarization on policy

issues and was preceded by demographic shifts between the parties and the polarization of

elected officials. Ideological sorting, whereby voters who are liberal have begun to identify as

Democrats, while those who are conservative have begun to identify as Republicans, is one

mechanism through which this polarization has occurred (Abramowitz & Fiorina, 2013). Ideological sorting allows politicians to adopt more extreme positions, as the median voter within each party has become less moderate.

The second component is affective polarization. Affective polarization refers to negative feelings held among voters in each party toward members of the opposing party, and suspicion toward partisan information that contradicts their belief system. Both components create a cycle of polarization that is exacerbated by the two-party system as well as the media (Iyengar et al., 2019). Although both aspects have important consequences for polarization as a whole, they are related but separable concepts (Iyengar et al., 2019). Research has shown that there can be affective polarization even in instances where little ideological polarization exists (Bougher, 2017).

Much of the literature has explored the correlates and consequences of ideological polarization, and the mechanisms through which it has occurred. However, work on the affective side of polarization has been limited and warrants further inquiry. The present study seeks to explore one potential but largely overlooked aspect of affective polarization, individual difference correlates, namely, intellectual humility. Intellectual humility is generally defined as a stable disposition, marked by the recognition that one's beliefs may be fallible, accompanied by an appropriate attentiveness to limitations in the evidentiary basis of these beliefs, and to one's limitations in obtaining and evaluating relevant information (Hopkin et al. 2014; Krumrei-Mancuso & Rouse, 2016; Leary et al., 2017).

Affective Polarization. Affective polarization is typically defined as the tendency of people identifying as Republicans or Democrats to view opposing partisans negatively and co-partisans positively (Iyengar et al., 2019). The American political climate over the past decade

has become nothing short of vitriolic. Kalmoe and Mason (2019) found that 42% of people in each party viewed the opposition as "downright evil" and that 20% of Democrats and 16% of Republicans "occasionally" think that the country would be better off if "large numbers of the opposition died". Implicit measures of partisan bias show that 70% of Democrats and Republicans show bias in favor of their party, while also holding negative feelings toward the opposition party (Iyengar & Westwood, 2015). Iyengar and Westwood (2015) created a brief partisan brief implicit association test (BIAT) in which participants completed four rounds of categorizations. The four rounds had two randomly ordered repetitions of the "ingroup + good" and the "outgroup + good" conditions. In each round whichever group was not paired with "good" was paired with a negative word (i.e. terrible, awful, worst horrible). The target stimuli were the Democratic and Republican mascots, the donkey and elephant respectively, the states of California (colored blue) and the state of Texas (colored red), the symbols for Greenpeace and the NRA, and a blue D and red R. The same study found that implicit partisan bias was more widespread than implicit racial bias (Iyengar & Westwood, 2015). Although these findings on their own are necessarily concerning, paired with other aspects of affective polarization, such as viewing the opposition party as "other" and attributing negative attributes to members and their values, is problematic, leading to widespread negative partisanship (Iyengar & Westwood, 2015).

This negative partisanship has been associated with blind party loyalty and straight-ticket voting (Abramowitz & Saunders, 2005). There is a positive relationship between ideological extremity and ideological constraint with increased affective polarization (Iyengar et al., 2019). Ideological constraint is distinct from the of stability of views over time. Constraint describes when only one ideological dimension underlies issue preferences, meaning that liberals examine

both social and economic issues through a liberal lens, while conservatives examine the same issues through a conservative one (Ansolabehere et al., 2008). One's views can have a large degree of constraint, but are not necessarily stable over time if the underlying ideology changes. High levels of ideological constraint results from ideological polarization, because as liberals and conservatives sort themselves into their respective parties, they also tend to align their views on both social and economic views with the ideology of the party (Egan, 2018). Democrats become more liberal economically, while Republicans become more conservative socially (Bougher, 2017; Egan, 2018).

Although tangible behaviors like voting and engagement are important pieces of partisanship, affect and recognition of other political parties as the "other" have impacted the tenor of politics. Within party feelings have changed little, but the feelings that Democrats and Republicans have about the opposing parties have grown consistently "colder" and more negative, regardless of levels of political knowledge or engagement (Abramowitz & Saunders, 2008; Bougher 2017). This trend is, in part, due to other salient differences between the parties, like the race and religious makeup of the majorities. This shift of the demographics of the parties has allowed both Democrats and Republicans to more easily categorize their opponents as "other" and therefore enemies (Iyengar et al., 2019). These feelings are reinforced through the information to which people choose to expose themselves to through partisan news media and their cognitive biases, such as confirmation bias.

The consequences of affective polarization are not limited to politics. Partisan cues can generate spillover and influence nonpolitical attitudes and decisions, meaning that levels of affective polarization predict both public and private behavior (Iyengar et al., 2019). Iyengar et al. (2012) found that the percentage of people who would be unhappy if a close family member

married someone of the opposite party has increased 35 points over the past five decades. There is an asymmetry in this finding, with Republicans reporting being more unhappy at this prospect (Iyengar et al., 2012). These findings are reflected in the fact that 80.5% of married couples share the same party identification (Iyengar et al., 2019). Another study found that partisan matching increased the likelihood of a couple messaging one another on a dating app, meaning that people were more likely to message a member of their own party than they were the opposing party. The researchers also found that partisan matching behavior was found at similar rates as matching based on education level and socioeconomic status. (Huber & Malhotra, 2017). Although much work has been done examining the consequences of affective polarization, little has been done examining potential individual correlates of the phenomenon. The present study hopes to expand this literature, looking specifically at intellectual humility.

Intellectual Humility. Intellectual humility is defined as a stable disposition marked by the recognition that one's beliefs may be fallible, accompanied by an appropriate attentiveness to limitations in the evidentiary basis of these beliefs and to one's limitations in obtaining and evaluating relevant information (Leary et al., 2017). Intellectual humility is positively correlated with need for cognition, meaning that participants who are higher in intellectual humility are more likely to enjoy exposing themselves to more and different kinds of information, and consider this information in greater detail (Leary et al., 2017). Intellectual humility is also negatively correlated with intolerance for ambiguity, meaning that participants who are higher in intellectual humility may have more difficulty suspending belief, and this desire for certainty seems may inhibit their ability to see their own views as incorrect (Leary et al., 2017). Participants with high levels of intellectual humility are more likely than those with low levels to exhibit behaviors such as being more open to learning about and exposing themselves to

opposing views (Hopkin et al., 2014; Krumrei-Mancuso & Rouse, 2016; Porter & Schumann, 2018). Participants high in intellectual humility are also more likely than those low in intellectual humility to view individuals espousing opposing views more positively and respectfully (Leary et al., 2017).

Much of the work conducted on intellectual humility has focused on religious beliefs. Hopkin, Hoyle, and Toner (2014) found that individuals who were both high in religious belief and low in intellectual humility were more likely to react strongly to opinions that supported or contradicted their own beliefs, positively and negatively respectively. Reactions to the opinions were measured by rating the quality of the opinion articles, ranging from very low to very high, and also rating the author on nine adjectives such as intelligent, competent, and so on. Composite reaction scores were then created for the article and for the author (Hopkin et al. 2014). The authors found that there was a modest curvilinear relationship between the strength of religious beliefs and intellectual humility, indicating that lower intellectual humility was correlated with stronger views both in favor of and against religious beliefs (Hopkin et al. 2014). These findings are similar to those found by Leary et al. (2017), whereby participants with high levels of intellectual humility showed more agreement across pro-religion, anti-religion, and balanced conditions, meaning that participants higher in intellectual humility were more likely to show greater agreement reactions to conditions that argued for the positive effects of religion, the negative effects of religion, and one that expounded a balanced analysis of the positive and negative effects of religion. This finding indicates that those higher in intellectual humility are more likely to respond with openness to information that opposes their own viewpoint. Reactions were measured through ratings of agreement with the views, how they felt reading the essay, the accuracy of the beliefs, and ratings of the author on nine adjectives. Intellectual humility also

predicted the accuracy ratings (Leary et al., 2017). Leary et al. found that although intellectual humility and religiosity were not significantly correlated, intellectual humility was inversely related to the extremity of the participants' views about religion. This finding leads to the question of whether intellectual humility bears a different relationship to belief certainty rather than belief strength, a question that will be examined in the present study.

A small body of literature has begun to examine the relationship between intellectual humility and political beliefs. Leary et al. (2017) found that participants who with high levels of intellectual humility were more likely that those with low levels of intellectual humility to say that they would vote for a candidate who had changed his or her position. Furthermore, the researchers observed a significant statistical interaction between intellectual humility and political affiliation when the participants were asked whether the candidate was engaged in flip-flopping. Specifically, among Republicans, higher intellectual humility was correlated with lower attributions of flip-flopping, but there was no significant relationship between intellectual humility and attributions of flip-flopping for participants who identified as Democrats or Independents. Porter and Schumann (2018) found that even when a sociopolitical issue was considered "extremely important" to a participant, those higher in intellectual humility made more respectful attributions and were more open to learning about the opposing perspective; these associations remained significant even after controlling for other personality constructs. The same study found that participants higher in intellectual humility were willing to expose themselves to a greater proportion of arguments that opposed their viewpoints on political issues than were participants lower in intellectual humility, however, the researchers did not ask why participants chose to read the arguments they did. The literature exploring intellectual humility and political beliefs is small in size and scope, a gap that the present study aims to begin to fill.

Affective polarization presents a problem, as the phenomenon has permeated every level of American politics, from the representatives and news outlets, to the voters themselves. Little work has been conducted to understand how to ameliorate its effects. Most work has approached it from a bias reduction standpoint. Ahler and Sood (2018) found that when respondents' misperceptions regarding such issues as party composition were corrected, respondents perceived the opposing party as less extreme and there was a decrease in affective polarization (Ahler & Sood, 2018). Reducing the salience of partisan identities in favor of a national identity, such as emphasizing the American identity, has been shown to result in less "out-group" negative affect (Iyengar et al., 2019).

The present study will attempt to expand on the current knowledge of intellectual humility and affective polarization. Specifically, I will examine whether intellectual humility buffers against affective polarization by administering measures of partisan identity, political engagement, negative partisanship, and affective polarization. I will also examine whether intellectual humility relates to the level of ideological constraint shown by participants, and how it relates to certainty versus strength of political beliefs.

Hypotheses

(1) I hypothesized that higher levels of intellectual humility will be associated with lower levels of affective polarization, as measured by feeling thermometers (see *Method*), above-and-beyond general humility.

(2) I hypothesized that intellectual humility will be non-significantly related to political belief strength but negatively related to political belief certainty.

(3) I hypothesized that participants higher in intellectual humility will show lower levels of ideological constraint, meaning those higher in intellectual humility will show a less of a correlation between their economic and social views.

(4) I hypothesized that participants higher in intellectual humility will show similar levels of forgiveness towards a candidate regardless of the candidate's party, as measured by composite forgiveness scores created through factor analysis (see *Method*)

(5) A final, exploratory, hypothesis was examined to determine if there is an asymmetry in intellectual humility scores based on political party affiliation.

Method

Participants

A sample of 542 community participants was recruited from the United States using Amazon's Mechanical Turk, a widely used platform for collecting online data. Only those prospective participants from North America who had completed at least 100 surveys with a record of having done "acceptable work" on at least 98% of prior MTurk tasks were able to see the online request for participation. Seven participants were excluded from data analysis on the basis of suspicious or nonsensical answers to open-ended questions, in the form of a political knowledge questionnaire that required only one or two word answers ("Do you happen to know what job or political office is now held by Mike Pence?", "Whose responsibility is it to determine if a law is constitutional or not, the president, the Congress, or the Supreme Court?", "How much of a majority is required for the U.S. Senate and House to override a presidential veto?", "Do you happen to know which party had the most members in the House of

Representatives in Washington before the midterm elections?", "Which party is more

conservative?") and nine were excluded for failing both attention checks (Anson, 2018; Delli-

Carpini & Keeter, 1993; Kennedy et al. 2018). The attention checks took the form of a forced

choice question that followed a short vignette asking whether the author of the passage agreed or

disagreed with a certain issue. The resulting total sample was 526 participants with 233 males

(44.3%) 290 females (55.1%), and 3 who did not wish to identify (.2%). Participant's ages

ranged from 19 to 72 (*M*=39.2 SD= 12.4). The sample is 80.8% White, 11.4% Black, 4.6%

Asian, and 2.7% other, with 6.3% identifying as Hispanic or Latino and 92.2% not identifying as

Hispanic or Latino. In terms of education 38.8% had a bachelor's degree and 14.8% obtained a

master's degree. In terms of political identification, 240 of the participants identified as

Democrats, 134 identified as Republicans, and 121 identified as Independent.

Procedure

Participants were told that the study would take approximately 100 minutes on average

and that they would be paid $5.25 (Kaufmann et al., 2011) for their participation. Once opened,

the study remained available to participants for 300 minutes. To enter the study, participants had

to correctly answer three questions about the informed consent description and click a

RECAPTCHA. Participants completed the survey, which contained a mix of open-ended and

forced choice questions that asked about their political and religious beliefs, as well as

personality inventories and cognitive measures. The average time for completion was 101

minutes.

Measures

Political Identity, Beliefs, and Engagement. Participants were asked in the demographics

section whether they voted in the last presidential election (yes/no), who they voted for

(candidate options: Donald Trump, Hillary Clinton, Gary Johnson, Jill Stein, Other (fill-in), and

whether they still approved of the candidate for whom they voted (yes/no). They were asked

which political party they identify with (party options: Republican, Democratic, Independent,

Socialist, Green, Libertarian, Other (fill-in) as well as if they usually think of themselves as a

Republican, a Democrat, an Independent, or other. In three separate items (α = .95), participants

then rated how liberal or conservative their beliefs were in general, socially, and economically

(left: 1 extremely liberal to right: 7 extremely conservative). Ideological constraint was measured

by correlating the liberalism/conservatism of their social belief and economic belief scores.

Participants were asked to indicate the strength (0: not at all strong to 100 extremely strong) and

certainty (0: not at all certain to 100 extremely certain) of their political beliefs. Participants were

also asked to self-report how many of five electoral activities they engaged in during the last

election cycle to determine their level of political engagement ("talked to other about why they

should or should not support a given candidate or party", "wore a button or displayed a yard

sign", "attended a meeting or rally", "donated money to a candidate or party", "volunteered for a

campaign"; see (Levendusky, 2011).

  Affective Polarization. Participants were asked to indicate how angry, how much

contempt, how disgusted, and how upset a typical individual from the opposing party made them

feel (0: not at all to 100: extremely), measures that were adapted from feeling thermometers used

in the ANES and in studies that examined the partisan divide (α = .95)(Abramowitz & Webster,

2005; Iyengar et al., 2019). Participants were asked whether they had ever changed their political

party, how many times, and how much money it would take for them to switch parties now ($1

to $1,000,000,000 or "no amount of money would persuade me to change political parties"). The

same questions were asked about whether they had ever voted for the opposing parties.

Participants were then asked three separate items ($\alpha = .85$) that asked how them to rate how upset, angry, and disgusted they would feel if a close family member married someone who belongs to the political party opposite theirs (left: 1 not at all to right: 7 extremely upset, angry, or disgusted).

Finally, participants were instructed to read a short vignette about a presidential candidate who made a mistake during a political debate but then corrected it and apologized. Participants were exposed to the same condition twice, one in which the candidate was a Republican and the other in which the candidate was a Democrat, while each participant got the conditions in a random order, the conditions were not counterbalanced. Following the vignette, the participant was asked to rate the candidate on ten qualities using a 7-point-Likert scale (e.g., Rate how intelligent the candidate is to you. 1: very unintelligent to 7: very intelligent). The participants were then asked how angry the candidate made them feel using the same 7-point-Likert scale. These questions were followed by four questions targeting how the participant perceived the candidate in terms of their voting behavior. Participants were asked whether the candidate making a mistake and then apologizing made them more or less likely to vote for him, whether the candidate was "politically ill-informed', whether the candidate apologized just to get elected, and whether it is forgivable for a presidential candidate to make a mistake during a debate.

Intellectual Humility. Four measures of intellectual humility were included in the present study. The Comprehensive Intellectual Humility Scale (CIH) is a 22-item self-report scale ($\alpha = .67$) measures four intercorrelated but distinct features of intellectual humility: independence of intellect and ego, openness to revising one's viewpoint, respect for others' viewpoints, and lack of intellectual overconfidence (Krumrei-Mancuso & Rouse, 2016). In the CIH participants were asked to rate how true 22 statements were of them using a 5 point-Likert scale ranging from 1:

Strongly disagree to 5: Strongly agree. Leary et al.'s (2017) 6 item Intellectual Humility Scale (α = .89) was used to measure the degree to which people recognize that their beliefs are fallible (Leary et al., 2017). Participants were asked to rate their agreement with six statements on a 5 point-Likert scale ranging from 1: Strongly disagree to 5: Strongly agree. Finally, two, 9-item, domain level versions of the Specific Intellectual Humility Scale were used, one for political beliefs (α = .92) and other for religious beliefs (α = .95) (Hoyle et al., 2016). Each scale asked participants to rate nine statements on a five point-Likert scale ranging from 1: Not at all like me to 5: Very much like me. The Specific Intellectual Humility Scale measure participants levels of intellectual humility in terms of specific domains like religion, politics, or science, or on issues like abortion, gun control, and healthcare (Hoyle et al. 2016).

Potential Correlates. A number of personality and dispositional cognitive variables were collected and examined as potential correlates to examine the specificity of the findings to intellectual humility *per se* as opposed to overlapping but conceptually separable constructs.

Regarding personality variables, the HEXACO-Honesty Humility subscale is made up of 16 items (α = .82) that assesses levels of sincerity, modesty, and greed avoidance (Ashton et al., 2014). Items are answered using a five point-Likert scale ranging from 1: Strongly disagree to 5: Strongly agree. The Dogmatism Scale is a 22-item scale (α = .63) that examines behaviors associated with dogmatism, like the categorical rejection of beliefs with which they do not agree, and the unjustified certainty about the truth of one's believes. Items are answered using a nine point-Likert scale ranging from -4: False to 4: True (Altemeyer, 2002). The Confirmatory Thinking Scale is a 10-item measure (α =.84) that assesses how likely participants are to engage in confirmatory thinking, a way that focuses narrowly on confirmation rather than a broad and critical examination of the evidence, alternative options, and perspectives (Kleiman & Hassin,

2013). Participants rate their agreement of ten statements using a five point-Likert scale ranging from 1: Strongly disagree to 5: Strongly agree. The NPI-13 scale is a 13-item measure ($\alpha = .82$) that evaluates narcissism by providing a total score as well as three subscale scores (Leadership/Authority, Grandiose Exhibitionism, Entitlement/Exploitativeness). Participants choose a statement that they most agree with from 13 pairs of attributes (Gentile et al., 2013). Finally, the Need for Closure Scale (NFCS) is a 15-item measure ($\alpha = .91$) that measures a participant's need to settle for any answer, as opposed to sustaining ambiguity. The need described in the NFCS is ostensibly undergirded by a tendency toward urgency and a tendency towards permanence (Roets & Van Hiel, 2011). Participants rate their agreement on the 15 statements using a six point-Likert scale ranging from 1: strongly disagree to 6: strongly agree (Roets & Van Hiel, 2011).

Several cognitive variables were also collected. Two political knowledge questionnaires were administered (Anson, 2018; Delli-Carpini & Keeter, 1993), whereby participants answered a total of 11 questions to test general political knowledge. A 4-item ($\alpha = .61$) Cognitive Reflection Test (CRT), was given to measure the participant's tendency to engage in reflection when their initial response is incorrect ("If you're running a race and you pass the person in second place, what place are you in?", "A farmer had 15 sheep and all but 8 died, How many are left?", "Emily's father has three daughters. The first two are named April and May. What is the third daughter's name?", and "How many cubic feet of dirt are there in a hole that is 3' deep x 3' wide x 3' long?") (Thomson & Oppenheimer, 2016). CRT scores tend to be correlated with global cognitive ability and performance on heuristics and biases tasks (Toplak, West, & Stanovich., 2011). Finally, participants completed the International Cognitive Ability Resource (ICAR) a measure that is moderately-to-strongly correlated with measures of overall cognitive

ability/intelligence and is suitable for online administration, wherein participants answered 16

multiple-choice questions (Condon & Revelle, 2014).

<div align="center">Results</div>

Intellectual Humility and Affective Polarization. Descriptive information for the primary

measures is shown in Table 1. Correlations between intellectual humility total scores and

measures of affective polarization are shown in Tables 2-4. As shown in Table 2 and 3,

intellectual humility measures were significantly and negatively correlated with measures of

affective polarization, specifically targeting negative affect towards the opposing party. As

shown in Table 4, the Specific Intellectual Humility Scale politics score was significantly and

negatively correlated with three of the four affective polarization behavioral measures. In

contrast, the Leary and Comprehensive intellectual humility scores were positively correlated

only with the opposition voting measure.

Table 5 provides the results of a hierarchical regression analysis to determine whether the

Leary Intellectual Humility Scale scores accounts for variance within all the affective

polarization measures above-and-beyond general humility, as indexed by HEXACO Honesty-

Humility scores. In this and subsequent regression analyses, HEXACO Honesty-Humility Scores

were entered in a first step in the question, followed by intellectual humility scores. Table 6

provides the results of a hierarchical regression analysis to determine whether the

Comprehensive Intellectual Humility Scale scores accounts for the variance within all the

affective polarization measures above-and-beyond HEXACO Honesty-Humility scores. Table 7

provides the results of a hierarchical regression analyses to determine whether the Specific

Intellectual Humility Scale scores for religion and politics accounts for the variance within all the

affective polarization measures above-and-beyond HEXACO Honesty-Humility scores. As

shown by these tables, the measures of intellectual humility provide incremental validity, indicating it provides unique variance above-and-beyond general humility.

Table 8 provides the results of a hierarchical regression analysis to determine whether the Leary Intellectual Humility Scale scores accounts for variance within all the affective polarization measures above-and-beyond general intelligence as indexed by the International Cognitive Ability Resource (ICAR). In this and subsequent regression analyses, ICAR total Scores were entered in a first step in the question, followed by intellectual humility scores. Table 9 provides the results of a hierarchical regression analysis to determine whether the Comprehensive Intellectual Humility Scale scores accounts for the variance within all the affective polarization measures above-and-beyond ICAR total scores. Table 10 provides the results of a hierarchical regression analyses to determine whether the Specific Intellectual Humility Scale scores for religion and politics accounts for the variance within all the affective polarization measures above-and-beyond ICAR total scores

Intellectual Humility and Political Belief Strength and Certainty. Correlations between intellectual humility total scores and measures of political belief strength and certainty are shown in Table 11. Both Leary and CIH total scores were not significantly related to political conviction and certainty, where the Specific Intellectual Humility Scale politics scores were negatively related to intellectual humility total scores ($p < .01$).

Intellectual Humility and Ideological Constraint. Levels of ideological constraint in both low intellectual humility groups and high intellectual humility groups are shown in Table 12. As ideological constraint was measured (see *Method*), a positive correlation means these beliefs "hang" together with both belief systems being informed by either a liberal or conservative ideology. To examine whether the levels of constraint differed statistically between the low

intellectual humility subgroup and high intellectual humility subgroup, a Fisher z test was used to compare the magnitude of the correlations. For the Specific Intellectual Humility Scale religion scores (z= 2.15), the levels of ideological constraint are statistically different between the low and high groups ($p < .05$). For Leary intellectual humility scale (z= 4.17) scores and specific intellectual humility politics scale (z= 4.54) scores, the levels of ideological constraint were statistically different between the low and high groups ($p < .001$). In contrast, there was no significant difference between ideological constraint for the Comprehensive intellectual humility scale (z= 0).

Intellectual Humility and Forgiveness. To examine the relationship between intellectual humility and forgiveness, a forgiveness composite score was first created through a factor analysis. A principal components analysis yielded one clear component with an eigenvalue of 58.94; the eigenvalues of the second and third components were 6.90 and 5.95, respectively. Hence, for the analyses reported here, we relied on a one factor solution.

Correlations between the forgiveness composite score, which was computed by unit-weighing items displaying a factor loading of above .40 and the summing them, and intellectual humility scores are shown in Table 13. Three of the four intellectual humility scores were significantly and positively correlated with forgiveness ($p < .01$).

Intellectual Humility and Party Affiliation. The mean and standard deviation of the intellectual humility scores for each subgroup are shown in Table 14. To examine the relationship between party affiliation and intellectual humility, correlations between overall belief score (i.e. "Are your overall views more liberal or conservative?") and the intellectual humility scores were calculated. These correlations are shown in Table 15. All correlations were negative, and three were significantly correlated with holding more liberal views. Correlations

between the Leary's Intellectual Humility Scale total scores, the Specific Intellectual Humility Scale for religion, and the Comprehensive Intellectual Humility Scale total scores and political identification were significant ($p < .01$). The Specific Intellectual Humility Scale politics scores was not significant.

Correlations between intellectual humility scores and affective polarization measures for those who identified as Republicans are shown in Tables 16-18. Correlations between intellectual humility scores and affective polarization measures for those who identified as Democrats are shown in Tables 19-21. Correlations between intellectual humility scores and affective polarization measures for those who identified as Independents are shown in Tables 22-24. Correlations between intellectual humility scores and affective polarization measures for Republicans, Democrats, and Independents yielded interesting results, with the largest correlations between intellectual humility and the affective measures found in the Republican sample, followed by the Democrat sample, and finally the Independent sample where there were the fewest significant correlations.

Discussion

The present study was conducted to further our understanding of individual difference correlates of affective polarization. More specifically, we undertook it to understand whether intellectual humility buffers against affective polarization. Specifically, the present study examined whether intellectual humility relates to levels of ideological constraint, is related to belief strength and certainty, and if it is associated with forgiveness, specifically in the domain of politics.

As hypothesized, all measures of intellectual humility were significantly and negatively correlated with measures of affective polarization that targeted negative affect towards the

opposition party. Participants higher in intellectual humility reported lower levels of disgust, anger, contempt, and feeling less upset towards members of the opposing party. Participants higher in intellectual humility also felt less upset, angry, and disgusted at the idea of someone close to them marrying a member of the opposing party. The relationship between behavioral measures, which targeted the negative partisanship aspect of affective polarization, and intellectual humility was less marked, with no measure of intellectual humility correlating significantly with party switching, and only small correlations with voting for the opposing party.

There was a notable difference among the magnitude of the results depending on which scale was used to measure intellectual humility. This difference may help to clarify intellectual humility as a construct. The Specific Intellectual Humility Scale for politics showed the largest magnitude correlations among the four measures. Although intellectual humility is defined as a stable disposition, the nature and extent of its situational specificity remains unclear (Leary et al., 2017; Porter & Schumann, 2018). These results, combined with the smallest magnitudes resulting from the Specific Intellectual Humility Scale for religion, point to the need for an examination of intellectual humility in specific domains of knowledge rather than exclusively as a global construct, to determine its situational specificity.

These results also highlight an important difference between belief strength and belief certainty in domain-level intellectual humility. As shown in the correlations between intellectual humility total scores and the political belief measures (Table 10), it is possible to simultaneously exhibit high belief conviction and high levels of intellectual humility. This finding may be at odds with others indicating that the relation between intellectual humility and the strength of beliefs, such as religious beliefs, is curvilinear, meaning those who held only moderate religious

beliefs are higher in intellectual humility than those who held either extremely religious or extremely non-religious beliefs (Hopkin et al., 2014). Moreover, Leary et al. (2017) found that intellectual humility was inversely related to the extremity of participants' views about religion. Ultimately, more work needs to be conducted to examine whether these findings are domain-specific, present in religious beliefs and not political beliefs, or rather extend to intellectual humility globally.

In terms of measuring intellectual humility as a global construct, the present study highlights interesting differences between the measures used. Although two scales are used to measure intellectual humility globally, they assess different conceptualizations of this construct and were associated with differences in magnitudes of correlations. The Comprehensive Intellectual Humility Scale measures four intercorrelated but distinct features of intellectual humility: independence of intellect and ego, openness to revising one's viewpoint, respect for other's viewpoints, and lack of intellectual overconfidence (Krumrei-Mancuso & Rouse, 2016). The Leary Intellectual Humility Scale measures the degree to which people recognize that their beliefs are fallible (Leary et al., 2017). Hence, the latter measure focuses more narrowly on intellectual humility as a meta-cognitive (thinking about our thinking) variable. The differences in the results between these two measures point to the possibility that the CIH measures one or more aspects of intellectual humility that the Leary Scale does not. This conclusion is also evident by the amount of variance above-and-beyond general humility accounted for by the CIH compared with the Leary IH scale (Table 4 and 5)

These results highlight the fact that intellectual humility is not necessarily defined as only the acknowledgement of the fallibility of one's beliefs, but also by such features as respect for others and willingness to change one's mind in light of new evidence. These results could also

underscore the fact that in the realm of politics, it is not necessarily the acknowledgement of the fallibility of one's own beliefs that buffers against affective polarization, but rather a more specific feature of intellectual humility that is measured by the CIH but not the Leary IH scale. One feature of intellectual humility that is measured by the CIH is respect for other's viewpoints. Affective polarization is undergirded by the idea that the opposition is somehow "other", so this specific feature of intellectual humility may attenuate these feelings. If one has respect for other's viewpoints, it means there is some acknowledgement that the other side's view has value, and this may work to lower the amount of negative affect that one can feel towards the outgroup.

The differences between the two scales are also shown in the results that examine ideological constraint. The subgroups that were low and high in intellectual humility showed the same levels of ideological constraint across the CIH, but there was a difference across the Leary IH scale, with those low in intellectual humility showing significantly more constraint than those high in intellectual humility. The low intellectual humility group, as measured by the CIH, showed significantly less constraint than the other three measures. Ultimately, this difference highlights a potential discrepancy between what the CIH is measuring and what the Leary scale is measuring, such as respect for the opposition, or at least acknowledgment that the opposition is not "other".

A final exploratory hypothesis was whether there was an asymmetry in intellectual humility scores related to party affiliation and ideological identification. Table 14 shows mixed results in this regard, with two measures showing correlations between higher intellectual humility and holding a more liberal ideology, and the other two showing correlations between higher intellectual humility and a more conservative ideology. Correlations between intellectual humility scores and affective polarization measures for Republicans, Democrats, and

Independents yielded interesting results, with the largest correlations between intellectual humility and the affective measures found in the Republican subgroup, followed by the Democrat subgroup and finally the Independent subgroup. This apparent asymmetry in how intellectual humility operates is supported by the literature, whereby in Republicans, higher intellectual humility was correlated with lower attributions of flip-flopping, another behavioral measure of affective polarization, while no such relationship existed in Democrats or Independents (Leary et al., 2017). There is also evidence that asymmetric polarization has taken place, whereby Republicans have moved further to the right than the Democrats have moved to the left (Mann & Ornstein, 2016). This asymmetric polarization might explain the differences in the correlations, so that the likely impact of intellectual humility is more notable in Republicans because they are more polarized to begin with.

Although the correlational nature of our design precludes definitive causal explanations, there are ways that intellectual humility could be operating to lower negative affect towards the opposing party. These findings raise the question of possible mechanisms for how intellectual humility is functioning. As shown in Table 13, higher levels of intellectual humility are associated with higher levels of forgiveness, so intellectual humility may operate on the levels of lowering the animosity that one feels towards the opposing party. This supposition is supported by the fact that intellectual humility was associated with affective polarization measures that examined only at feelings towards the opposite party, but not with the measures intended to examine the behavioral aspects of negative partisanship such as party changing and opposition voting, although restriction in the amount of participants who change their party may have limited the ability to test these associations rigorously. More work needs to be done to explore the mechanisms through which intellectual humility operates.

Several limitations of the present findings should be noted. Our reliance on self-reports measures could be problematic. For example, asking participants to rate themselves on a scale from liberal to conservative on different dimensions may introduce bias, as a conferred-upon definition of these terms was not provided. To ameliorate this bias in future research, both issue-level should be asked, and ideological consistency should be measured and then compared with self-reported global appraisals of political affiliation. Another weakness to contend with is the so-called "paradox of humility" wherein humility is seen as a socially desirable trait, which leads to potential bias in self-report measures, as well as the "non-overestimation" of one's own ideas, leading to a tendency of participants who may not be humble describing themselves as such (Hare, 1996). On the flip side of the coin, many intellectually humble participants may question their intellectual capability and describe themselves as non-humble. In addition, although our sample was reasonably large and broadly representative of the larger U.S. population in terms of racial demographics, MTurk samples tend to be more educated on the whole (Anson, 2018). This difference may diminish the external validity of our findings regarding the Cognitive Reflection Test (CRT), the International Cognitive Ability Resource (ICAR), and political knowledge measures.

Despite these limitations, many opportunities exist for further exploration in the realm of intellectual humility and affective polarization. In terms of intellectual humility, the mechanism(s) through which it operates in terms of bias in general as well as in specific domains of knowledge, is still unknown. Much work still needs to be done to fully understand intellectual humility as a construct, as highlighted by the discrepancies between measures in the present study. There are also future directions available in the realm of affective polarization and how to mitigate the consequences of the phenomenon. Although some researchers have tackled this

problem from a bias reduction standpoint (Ahler & Sood, 2018), little work has been done to

examine individual difference correlates of the phenomenon, such as other personality or

cognitive constructs. Ultimately, although the present study provides a glimpse into the

relationship between psychological constructs and political polarization, it is only the first step in

a lengthy program of research.

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Table 1. *Mean and Standard Deviation of Primary Variables.*

Variables		M	SD
Political Beliefs			
	LeftorRight	3.57	1.83
	Social	3.37	1.91
	Economic	3.82	1.88
	PoliticalConviction	72.50	24.24
	PoliticalCertainty	74.66	22.89
Affective Polarization			
	OppoAnger	43.29	30.40
	OppoContempt	40.25	31.32
	OppoDisgust	39.17	33.04
	OppoUpset	41.82	31.37
	PartyChange	1.79	.40
	PartyChangeMoney	10.85	4.68
	OppoVote	1.60	.491
	OppoVoteMoney	9.80	5.24
	MarriageUpset	2.30	1.64
	MarriageAnger	2.10	1.56
	MarriageDisgust	2.15	1.66
Intellectual Humility			
	Leary IH	23.35	4.53
	CIH	82.65	13.30
	Specific IH: Politics	31.74	8.05
	Specific IH: Religion	29.42	10.82
HEXACO-HH		57.11	11.80
Cognitive Variables			
	ICAR	7.17	3.58
	CRT	2.47	1.17

Table 2. *Correlations between Intellectual Humility scores and Affective Polarization measures.*

IH	OppoAnger	OppoContempt	OppoUpset	OppoDisgust
Leary IH Total	*-.25*	*-.25*	*-.23*	*-.26*
CIH Total	*-.30*	*-.34*	*-.28*	*-.33*
Specific IH Politics Total	*-.40*	*-.42*	*-.37*	*-.43*
Specific IH Religion Total	*-.16*	*-.15*	*-.16*	*-.20*

Note: Bolded is *p*<.001, italicized is *p*<.01, and * is *p*<.05.

Table 3. *Correlations between Intellectual Humility scores and Affective Polarization measures.*

IH	MarriageUpset	MarriageAnger	MarriageDisgust
Leary IH Total	*-.28*	*-.28*	*-.28*
CIH Total	*-.34*	*-.35*	*-.35*
Specific IH Politics Total	*-.38*	*-.34*	*-.38*
Specific IH Religion Total	*-.16*	*-.15*	*-.16*

Note: Bolded is $p<.001$, italicized is $p<.01$, and * is $p<.05$.

Table 4. *Correlations between Intellectual Humility scores and behavioral Affective Polarization measures.*

IH	PartyChange	PartyChangeMoney	OppoVote	OppoVoteMoney
Leary IH Total	.04	-.01	*.21*	-.01
CIH Total	.01	.08	*.15*	.05
Specific IH Politics Total	.01	-*.14*	*.18*	-*.15*
Specific IH Religion Total	-.23	-.05	.09*	-.06

Note: Bolded is *p*<.001, italicized is *p*<.01, and * is *p*<.05.

Table 5. *Incremental validity of Leary IH total scores above-and-beyond HEXACO Honesty- Humility.*

Predictor	Outcome	*b* (β)	Std. Error for *b*	95% CI for *b*	Adj. R2	ΔR²
Leary IH Total	**M1. OppoAnger**	**-1.66 (-.25)**	.30	-2.24, -1.07	.06	.06
	M2. OppoContempt	**-1.65 (-.24)**	.31	-2.25, -1.05	.07	.06
	M3. OppoDisgust	**-1.93 (-.23)**	.32	-2.56, -1.30	.07	.07
	M4. OppoUpset	**-1.56 (-.22)**	.31	-2.16, -.95	.05	.05
	M5. OppoVote	**-.02 (-.19)**	.01	-.03, -.01	.04	.04
	M6. OppoVoteMoney	-.09 (-.08)	.05	-.19, .01	.09	.01
	M7. PartyChange	-.00 (-.02)	.00	-.01, .01	.00	.00
	M8. PartyChangeMoney	-.07 (-.07)	.04	-.16, .02	.10	.01
	M9. MarriageUpset	**-.11 (-.29)**	.02	-.14, -.07	.08	.08
	M10. MarriageAnger	**-.09 (-.27)**	.02	-.12, -.06	.07	.07
	M11. MarriageDisgust	**-.11 (-.28)**	.02	-.14, -.07	.08	.08

Note: Bolded is *p*<.001, italicized is *p*<.01, and * is *p*<.05.

Table 6. *Incremental validity of CIH total scores above-and-beyond HEXACO Honesty-Humility.*

Predictor	Outcome	*b* (β)	Std. Error for *b*	95% CI for *b*	Adj. R2	ΔR²
CIH Total	**M1. OppoAnger**	**-.70 (-.31)**	.10	-.907, -.497	.09	.09
	M2. OppoContempt	**-.79 (-.34)**	.11	-1.00, -.59	.11	.10
	M3. OppoDisgust	**-.86 (-.34)**	.11	-1.08, -.63	.11	.11
	M4. OppoUpset	**-.67 (-.28)**	.11	-.88, -.45	.07	.07
	M5. OppoVote	*-.01 (-.13)*	.00	-.01, -.00	.03	.02
	M6. OppoVoteMoney	-.02(-.06)	.02	-.06, .01	.08	.00
	M7. PartyChange	.00 (.04)	.00	-.00, .00	.01	.00
	M8. PartyChangeMoney	-.01 (-.02)	.02	-.04, .02	.08	.00
	M9. MarriageUpset	**-.05 (-.36)**	.01	-.06, -.03	.12	.12
	M10.MarriageAnger	**-.04 (-.36)**	.01	-.05, -.03	.12	.12
	M11. MarriageDisgust	**-.05 (-.37)**	.01	-.06, -.04	.12	.12

Note: Bolded is *p*<.001, italicized is *p*<.01, and * is *p*<.05.

Table 7. *Incremental validity of Specific Religion and Politics IH Total scores above-and-beyond HEXACO Honesty-Humility.*

Predictor	Outcome	*b* (β)	Std. Error for *b*	95% CI for *b*	Adj. R2	ΔR²
Specific Rel IH Total	**M1. OppoAnger**	*-.43 (-.16)*	.12	-.67, -.19	.03	.02
	M2. OppoContempt	*-.43 (-.15)*	.13	-.67, -.18	.05	.02
	M3. OppoDisgust	**-.60 (-.20)**	.13	-.86, -.33	.04	.04
	M4. OppoUpset	**-.46 (-.16)**	.13	-.71, -.21	.03	.03
	M5. OppoVote	-.01 (-.09)*	.00	-.01, .00	.01	.01
	M6. OppoVoteMoney	-.03 (-.07)	.02	-.07, .01	.08	.00
	M7. PartyChange	.00 (.03)	.00	1.77, 1.84	.00	.00
	M8. PartyChangeMoney	-.03 (-.06)	.02	-.06, .01	.09	.00
	M9. MarriageUpset	**-.02 (-.16)**	.01	-.04, -.01	.02	.03
	M10. MarriageAnger	*-.02 (-.15)*	.01	-.03, -.01	.03	.02
	M11. MarriageDisgust	**-.02 (-.16)**	.01	-.04, -.01	.02	.02
Specific Pol IH Total	**M1. OppoAnger**	**-1.50 (-.40)**	.16	-1.80, -1.20	.16	.16
	M2. OppoContempt	**-1.64 (-.42)**	.16	-1.95, -1.33	.18	.18
	M3. OppoDisgust	**-1.78 (-.44)**	.17	-2.11, -1.45	.19	.19
	M4. OppoUpset	**-1.43 (-.37)**	.16	-1.76, -1.11	.14	.13
	M5. OppoVote	**-.01 (-.17)**	.00	-.02, -.01	.04	.03
	M6. OppoVoteMoney	**-.11 (-.17)**	.03	-.17, -.06	.11	.03
	M7. PartyChange	.00 (.00)	.00	-.00, .00	.00	.00
	M8. PartyChangeMoney	**-.09 (-.16)**	.03	-.14, -.04	.11	.03
	M9. MarriageUpset	**-.07 (-.38)**	.01	-.09, -.06	.14	.15
	M10. MarriageAnger	**-.07 (-.34)**	.01	-.08, -.05	.12	.11
	M11.MarriageDisgust	**-.08 (-.40)**	.01	-.10, -.06	.15	.15

Note: Bolded is *p*<.001, italicized is *p*<.01, and * is *p*<.05.

Table 8. *Incremental validity of Leary IH total scores above-and-beyond ICAR total scores.*

Predictor	Outcome	*b* (β)	Std. Error for *b*	95% CI for *b*	Adj. R2	ΔR²
Leary IH Total	**M1. OppoAnger**	**-1.54 (-.23)**	.31	-2.16, -.93	.06	.05
	M2. OppoContempt	**-1.53 (-.22)**	.32	-2.17, -.90	.06	.05
	M3. OppoDisgust	**-1.75 (-.24)**	.34	-2.41, -1.08	.07	.06
	M4. OppoUpset	**-1.49 (-.22)**	.32	-2.12, -.86	.05	.05
	M5. OppoVote	**-.02 (-.18)**	.01	-.03, -.01	.08	.03
	M6. OppoVoteMoney	-.02 (-.01)	.05	-.12, .01	.02	.00
	M7. PartyChange	-.00 (-.02)	.00	-.01, .01	.01	.00
	M8. PartyChangeMoney	-.02 (-.02)	.05	-.12, .08	.00	.00
	M9. MarriageUpset	**-.10 (-.27)**	.02	-.13, -.06	.07	.07
	M10. MarriageAnger	**-.09 (-.25)**	.02	-.12, -.06	.08	.06
	M11. MarriageDisgust	**-.10 (-.26)**	.02	-.14, -.07	.07	.07

Note: Bolded is *p*<.001, italicized is *p*<.01, and * is *p*<.05.

Table 9. *Incremental validity of CIH total scores above-and-beyond ICAR Total Scores.*

Predictor	Outcome	*b* (β)	Std. Error for *b*	95% CI for *b*	Adj. R2	ΔR²
CIH Total	**M1. OppoAnger**	**-.70 (-.30)**	.11	-.91, -.48	.09	.09
	M2. OppoContempt	**-.77 (-.33)**	.11	-.99, -.55	.11	.10
	M3. OppoDisgust	**-.80 (-.32)**	.12	-1.03, -.57	.10	.10
	M4. OppoUpset	**-.67 (-.29)**	.11	-.90, -.46	.08	.08
	M5. OppoVote	*-.01 (-.13)*	.00	-.01, -.00	.06	.02
	M6. OppoVoteMoney	.02(.06)	.02	-.01, .06	.02	.00
	M7. PartyChange	.00 (.01)	.00	-.00, .00	.01	.00
	M8. PartyChangeMoney	.03 (.07)	.02	-.01, .06	.01	.01
	M9. MarriageUpset	**-.04 (-.34)**	.01	-.05, -.03	.11	.11
	M10.MarriageAnger	**-.04 (-.34)**	.01	-.05, -.03	.13	.11
	M11. MarriageDisgust	**-.04 (-.33)**	.01	-.05, -.03	.11	.11

Note: Bolded is *p*<.001, italicized is *p*<.01, and * is *p*<.05.

Table 10. *Incremental validity of Specific Religion and Politics IH Total scores above-and-beyond ICAR total scores.*

Predictor	Outcome	*b* (β)	Std. Error for *b*	95% CI for *b*	Adj. R2	ΔR²
Specific Rel IH Total	M1. OppoAnger	*-.36 (-.13)*	.13	-.62, -.09	.02	.02
	M2. OppoContempt	-.36 (-.12)*	.14	-.63, -.09	.02	.02
	M3. OppoDisgust	**-.55 (-.18)**	.14	-.83, -.26	.05	.03
	M4. OppoUpset	*-.44 (-.16)*	.14	-.71, -.17	.02	.02
	M5. OppoVote	-.00 (-.07)	.00	-.01, .00	.05	.01
	M6. OppoVoteMoney	-.02 (-.03)	.02	-.06, .03	.02	.00
	M7. PartyChange	.00 (.07)	.00	-.01, .01	.01	.01
	M8. PartyChangeMoney	-.02 (-.05)	.02	-.06, .02	.00	.00
	M9. MarriageUpset	*-.02 (-.15)*	.01	-.04, -.01	.02	.02
	M10. MarriageAnger	*-.02 (-.13)*	.01	-.03, -.01	.03	.02
	M11. MarriageDisgust	*-.02 (-.15)*	.01	-.04, -.01	.03	.02
Specific Pol IH Total	**M1. OppoAnger**	**-1.50 (-.40)**	.17	-1.80, -1.16	.16	.15
	M2. OppoContempt	**-1.60 (-.41)**	.17	-1.94, -1.26	.17	.17
	M3. OppoDisgust	**-1.74 (-.42)**	.18	-2.10, -1.38	.19	.18
	M4. OppoUpset	**-1.44 (-.37)**	.18	-1.78, -1.09	.14	.13
	M5. OppoVote	**-.01 (-.18)**	.00	-.02, -.01	.08	.03
	M6. OppoVoteMoney	**-.15 (-.18)**	.03	-.18, -.06	.05	.03
	M7. PartyChange	.00 (-.01)	.00	-.01, .00	.01	.00
	M8. PartyChangeMoney	**-.10 (-.18)**	.03	-.16, -.05	.03	.03
	M9. MarriageUpset	**-.08 (-.39)**	.01	-.10, -.06	.15	.15
	M10. MarriageAnger	**-.07 (-.34)**	.01	-.09, -.05	.13	.12
	M11.MarriageDisgust	**-.08 (-.39)**	.01	-.10, -.06	.15	.15

Note: Bolded is *p*<.001, italicized is *p*<.01, and * is *p*<.05.

Table 11. *Correlations between IH total scores and Political Belief measures.*

IH	Political Conviction	Political Certainty
Leary Total	-.04	-.10
CIH Total	-.05	-.02
Specific IH Politics Total	*-.26*	*-.35*
Specific IH Religion Total	-.08	-.14*

Note: Bolded is $p<.001$, italicized is $p<.01$, and * is $p<.05$.

Table 12. *Levels of ideological constraint in Low IH and High IH Groups.*

IH	Low IH	High IH
Leary Total	*.86*	*.71*
CIH Total	*.79*	*.79*
Specific IH Politics Total	*.86*	*.71*
Specific IH Religion Total	*.83*	*.76*

Note: Bolded is $p<.001$, italicized is $p<.01$, and * is $p<.05$.

Table 13. *Correlations between Intellectual Humility total scores and Forgiveness scores.*

	Candidate Party	Leary Total	CIH Total	Specific IH Pol Total	Specific IH Rel Total
Forgiveness	*Democratic Candidate*	*.38*	*.36*	*.39*	.15*
	Republican Candidate	*.27*	*.31*	*.26*	*.25*

Note: Bolded is *p*<.001, italicized is *p*<.01, and * is *p*<.05.

Table 14. *Mean and Standard Deviation of IH Scores for Subgroups.*

Subgroup	Measure	M	SD
Republican[a]	*Leary IH Scale*	21.51	5.48
	CIH	78.29	14.35
	Specific IH: Politics	30.00	9.18
	Specific IH: Religion	27.27	10.97
Democrat[b]	*Leary IH Scale*	23.71	4.18
	CIH	84.00	12.87
	Specific IH: Politics	31.16	7.76
	Specific IH: Religion	30.36	10.77
Independent[c]	*Leary IH Scale*	24.26	3.80
	CIH	84.26	12.41
	Specific IH: Politics	34.00	6.66
	Specific IH: Religion	29.94	10.55

Note: a. *N*=134, b. *N*= 240, c. *N*=121

Table 15. *Correlations between IH total scores and Political Identification.*

IH	LeftorRight
Leary Total	*-.20*
CIH Total	*-.19*
Specific IH Politics Total	-.08
Specific IH Religion Total	*-.17*

Note: Bolded is *p*<.001, italicized is *p*<.01, and * is *p*<.05.

Table 16. *Correlations between Intellectual Humility scores and Affective Polarization measures for Republicans.*

IH	OppoAnger	OppoContempt	OppoUpset	OppoDisgust
Leary IH Total	*-.44*	*-.40*	*-.47*	*-.39*
CIH Total	*-.51*	*-.53*	*-.49*	*-.46*
Specific IH Politics Total	*-.47*	*-.48*	*-.56*	*-.42*
Specific IH Religion Total	-.21*	-.17	-.27	-.21*

Note: Bolded is *p*<.001, italicized is *p*<.01, and * is *p*<.05.

Table 17. *Correlations between Intellectual Humility scores and Affective Polarization measures for Republicans*

IH	MarriageUpset	MarriageAnger	MarriageDisgust
Leary IH Total	*-.37*	*-.35*	*-.35*
CIH Total	*-.50*	*-.46*	*-.44*
Specific IH Politics Total	*-.44*	*-.35*	*-.40*
Specific IH Religion Total	-.19*	-.13	-.13

Note: Bolded is *p*<.001, italicized is *p*<.01, and * is *p*<.05.

Table 18. *Correlations between Intellectual Humility scores and behavioral Affective Polarization measures for Republicans.*

IH	PartyChange	PartyChangeMoney	OppoVote	OppoVoteMoney
Leary IH Total	.02	-.12	*.31*	-.15
CIH Total	-.07	.02	*.32*	-.05
Specific IH Politics Total	-.04	-.20*	*.33*	-.22*
Specific IH Religion Total	-.01	*-.26*	.16	-.22*

Note: Bolded is *p*<.001, italicized is *p*<.01, and * is *p*<.05.

Table 19. *Correlations between Intellectual Humility scores and Affective Polarization measures for Democrats.*

IH	OppoAnger	OppoContempt	OppoUpset	OppoDisgust
Leary IH Total	*-.23*	*-.19*	*-.18*	*-.18*
CIH Total	*-.26*	*-.26*	*-.29*	*-.24*
Specific IH Politics Total	*-.38*	*-.39*	*-.41*	*-.35*
Specific IH Religion Total	*-.20*	*-.19*	*-.21*	*-.18*

Note: Bolded is *p*<.001, italicized is *p*<.01, and * is *p*<.05.

Table 20. *Correlations between Intellectual Humility scores and Affective Polarization measures for Democrats.*

IH	MarriageUpset	MarriageAnger	MarriageDisgust
Leary IH Total	*-.22*	*-.25*	*-.25*
CIH Total	*-.25*	*-.32*	*-.31*
Specific IH Politics Total	*-.32*	*-.35*	*-.36*
Specific IH Religion Total	-.15*	*-.23*	*-.21*

Note: Bolded is *p*<.001, italicized is *p*<.01, and * is *p*<.05.

Table 21. *Correlations between Intellectual Humility scores and behavioral Affective Polarization measures for Democrats.*

IH	PartyChange	PartyChangeMoney	OppoVote	OppoVoteMoney
Leary IH Total	.08	.06	.15*	.01
CIH Total	.05	.10	.09	.04
Specific IH Politics Total	-.01	-.15*	.07	-*.20*
Specific IH Religion Total	-.03	-.02	.10	-.11

Note: Bolded is *p*<.001, italicized is *p*<.01, and * is *p*<.05.

Table 22. *Correlations between Intellectual Humility scores and Affective Polarization measures for Independents.*

IH	OppoAnger	OppoContempt	OppoUpset	OppoDisgust
Leary IH Total	-.02	-.09	-.06	-.04
CIH Total	-.12	*-.26*	-.19*	-.11
Specific IH Politics Total	-.18*	*-.32*	-.24*	-.23*
Specific IH Religion Total	-.01	-.03	-.06	-.04

Note: Bolded is $p<.001$, italicized is $p<.01$, and * is $p<.05$.

Table 23. *Correlations between Intellectual Humility scores and Affective Polarization measures for Independents*

IH	MarriageUpset	MarriageAnger	MarriageDisgust
Leary IH Total	-.12	-.10	-.14
CIH Total	*-.24*	-.20*	-.19*
Specific IH Politics Total	*-.34*	*-.25*	*-.37*
Specific IH Religion Total	-.04	.01	-.04

Note: Bolded is *p*<.001, italicized is *p*<.01, and * is *p*<.05.

Table 24. *Correlations between Intellectual Humility scores and behavioral Affective Polarization measures for Independents.*

IH	PartyChange	PartyChangeMoney	OppoVote	OppoVoteMoney
Leary IH Total	.02	.01	.16	.08
CIH Total	-.01	.13	.08	.15
Specific IH Politics Total	.04	-.12	.10	-.10
Specific IH Religion Total	.06	.03	.05	.13

Note: Bolded is *p*<.001, italicized is *p*<.01, and * is *p*<.05.