

Supplement

Additional Measures

Table S1 lists additional measures that were collected after each conversation.

| Question | Scale Endpoints | Scale Labels |
|--|---------------------|--|
| How would you rate this peer-to-peer conversation? | 1 to 10 | Poor to Excellent |
| What did you like most about this peer-to-peer conversation? | N/A (free response) | N/A (free response) |
| What improvements could we make to the peer-to-peer experience? | N/A (free response) | N/A (free response) |
| How effective were the norms you set in establishing a space that made you feel comfortable sharing with each other? | 1 to 5 | Not at all effective to Very effective |
| My conversation partner(s) seemed generally curious to learn about perspectives different from their own. | 1 to 7 | Strongly agree to Strongly disagree |
| My conversation partner(s) seemed dismissive of viewpoints that differed from their own. | 1 to 7 | Strongly agree to Strongly disagree |

Covariance Parameters

Table S2 lists results for the covariance parameters in the three primary analyses. We were not able to specify random slopes for each group.

| | Est. | SE | Z | p |
|---------------------------------|------|------|------|-------|
| Potential for Friendship | | | | |
| • Variance due to group | 0.05 | 0.02 | 2.26 | 0.012 |

| | | | | |
|--|-------|------|-------|---------|
| ● Residual variance at pre | 1.01 | 0.05 | 21.34 | < .0001 |
| ● Residual variance at post | 0.85 | 0.04 | 20.72 | < .0001 |
| ● Residual variance at follow-up | 0.60 | 0.05 | 13.17 | < .0001 |
| ● Within-person covariance between pre and post | 0.39 | 0.03 | 11.41 | < .0001 |
| ● Within-person covariance between pre and follow-up | 0.38 | 0.04 | 9.34 | < .0001 |
| ● Within-person covariance between post and follow-up | 0.33 | 0.04 | 8.87 | < .0001 |
| ● Between-person covariance at pre | 0.03 | 0.05 | 0.58 | 0.56 |
| ● Between-person covariance at post | 0.01 | 0.04 | 0.25 | 0.80 |
| ● Between-person covariance at follow-up | -0.01 | 0.05 | -0.23 | 0.82 |
| ● Between-person covariance between pre and post | -0.02 | 0.03 | -0.52 | 0.60 |
| ● Between-person covariance between pre and follow-up | -0.01 | 0.04 | -0.32 | 0.75 |
| ● Between-person covariance between post and follow-up | -0.02 | 0.04 | -0.61 | 0.54 |
| Perceived Partner Acceptance | | | | |
| ● Variance due to group | 0.03 | 0.02 | 2.00 | 0.023 |
| ● Residual variance at pre | 1.01 | 0.05 | 21.37 | < .0001 |
| ● Residual variance at post | 0.84 | 0.04 | 20.76 | < .0001 |
| ● Residual variance at follow-up | 0.61 | 0.05 | 13.19 | < .0001 |
| ● Within-person covariance between pre and post | 0.39 | 0.03 | 11.44 | < .0001 |
| ● Within-person covariance between pre and follow-up | 0.38 | 0.04 | 9.32 | < .0001 |
| ● Within-person covariance between post and follow-up | 0.33 | 0.04 | 8.92 | < .0001 |
| ● Between-person covariance at pre | 0.03 | 0.05 | 0.61 | 0.54 |

| | | | | |
|--|--------|------|-------|---------|
| ● Between-person covariance at post | -0.004 | 0.04 | -0.09 | 0.93 |
| ● Between-person covariance at follow-up | -0.01 | 0.05 | -0.23 | 0.81 |
| ● Between-person covariance between pre and post | -0.02 | 0.03 | -0.70 | 0.49 |
| ● Between-person covariance between pre and follow-up | -0.01 | 0.04 | -0.33 | 0.75 |
| ● Between-person covariance between post and follow-up | -0.03 | 0.04 | -0.84 | 0.40 |
| Trust of Partner | | | | |
| ● Variance due to group | 0.04 | 0.02 | 2.10 | 0.018 |
| ● Residual variance at pre | 1.01 | 0.05 | 21.35 | < .0001 |
| ● Residual variance at post | 0.85 | 0.04 | 20.74 | < .0001 |
| ● Residual variance at follow-up | 0.61 | 0.05 | 13.19 | < .0001 |
| ● Within-person covariance between pre and post | 0.39 | 0.03 | 11.46 | < .0001 |
| ● Within-person covariance between pre and follow-up | 0.39 | 0.04 | 9.42 | < .0001 |
| ● Within-person covariance between post and follow-up | 0.34 | 0.04 | 8.97 | < .0001 |
| ● Between-person covariance at pre | 0.03 | 0.05 | 0.68 | 0.50 |
| ● Between-person covariance at post | 0.01 | 0.04 | 0.12 | 0.90 |
| ● Between-person covariance at follow-up | -0.01 | 0.05 | -0.22 | 0.83 |
| ● Between-person covariance between pre and post | -0.01 | 0.03 | -0.42 | 0.67 |
| ● Between-person covariance between pre and follow-up | -0.01 | 0.04 | -0.17 | 0.87 |
| ● Between-person covariance between post and follow-up | -0.03 | 0.04 | -0.70 | 0.48 |

Sensitivity Analyses

As noted in the main text, we conducted three sets of sensitivity analyses to examine the robustness of our effects. In the first set of sensitivity analyses, when we aggregated the affiliative perceptions across four conversations, we excluded instances in which participants responded with the same answer for five questions in consecutive order that all followed a “strongly agree to strongly disagree” format in the answer choices. Three of the five questions are the ones we analyze here (potential for friendship, perceived partner acceptance, and trust of partner)¹ but we looked at all five questions when deciding which responses to exclude given that all five questions were in consecutive order, all five questions followed the same answer format, and repetitive responding across all five questions was more likely to be indicative of answering without paying attention than across just three of the five questions. This resulted in data from 11.2% of possible conversations not being included in the aggregate affiliative perceptions.

In the second set of sensitivity analyses, we incorporated both partners’ age, race, and gender into our models as well as the combination of both partners’ characteristics together. We wanted to ensure that the moderation of changes in intellectual humility by affiliative perceptions existed above and beyond any similarity or matches between partners in demographic characteristics. For age, we used a discrepancy score approach, in which we included the absolute value of the difference between one partner’s age and the other partner’s age. For race and gender, which were categorical variables, we used a dyadic match option, in which we included a variable that represented whether two partners matched on race or gender (coded as 1)

¹ The additional two questions were “My conversation partner(s) seemed generally curious to learn about perspectives different from their own” and “My conversation partner(s) seemed dismissive of viewpoints that differed from their own”.

or not (coded as -1). We included main effects of age, race, and gender for both partners, which are necessary for valid interpretations of discrepancy and dyadic match scores (Kenny et al., 2006).

In the third set of sensitivity analyses, we incorporated both partners' ideology (on a scale of very progressive [1] to very conservative [7]) into our models as well as the combination of both partners' ideology together. We wanted to ensure that the moderation of changes in intellectual humility by affiliative perceptions existed above and beyond any similarity or matches between partners in ideology. We used a discrepancy score approach, in which we included the absolute value of the difference between one partner's ideology and the other partner's ideology. Again, we included main effects of ideology for both partners, which are necessary for valid interpretations of the discrepancy score (Kenny et al., 2006).

Potential for Friendship

First Sensitivity Analysis: Excluding Repetitive Responses. As in the primary analysis, intellectual humility varied significantly by measurement phase ($F(2, 316) = 64.48, p < .0001, R^2 = 29.0\%$), potential for friendship ($F(1, 806) = 22.6, p < .0001, R^2 = 2.7\%$), and an interaction between phase and potential for friendship ($F(2, 570) = 5.83, p = .003, R^2 = 2.0\%$). To the extent that people perceived greater potential for friendship with their conversation partner, they showed greater increases in intellectual humility from pre to post ($b = 0.16, SE = 0.05, t(865) = 3.05, p = .002, R^2 = 1.0\%$) and from pre to follow-up ($b = 0.17, SE = 0.06, t(453) = 2.69, p = .007, R^2 = 1.6\%$).

Second Sensitivity Analysis: Incorporating Both Partners' Age, Race, and Gender. As in the primary analysis, intellectual humility varied significantly by measurement phase ($F(2, 297) = 57.2, p < .0001, R^2 = 27.8\%$), potential for friendship ($F(1, 762) = 29.78, p < .0001, R^2 =$

3.8%), and an interaction between phase and potential for friendship ($F(2, 544) = 6.98, p = .001, R^2 = 2.5\%$). To the extent that people perceived greater potential for friendship with their conversation partner, they showed greater increases in intellectual humility from pre to post ($b = 0.19, SE = 0.05, t(822) = 3.50, p < .001, R^2 = 1.5\%$) and from pre to follow-up ($b = 0.18, SE = 0.06, t(421) = 2.77, p = .006, R^2 = 1.8\%$).

Third Sensitivity Analysis: Incorporating Both Partners' Ideology. As in the primary analysis, intellectual humility varied significantly by measurement phase ($F(2, 178) = 37.51, p < .0001, R^2 = 29.6\%$), potential for friendship ($F(1, 482) = 14.00, p = .0002, R^2 = 2.8\%$), and an interaction between phase and potential for friendship ($F(2, 308) = 6.29, p = .002, R^2 = 3.9\%$). To the extent that people perceived greater potential for friendship with their conversation partner, they showed greater increases in intellectual humility from pre to post ($b = 0.18, SE = 0.07, t(531) = 2.66, p = .008, R^2 = 1.3\%$) and from pre to follow-up ($b = 0.24, SE = 0.07, t(247) = 3.33, p = .001, R^2 = 4.3\%$).

Perceived Partner Acceptance

First Sensitivity Analysis: Excluding Repetitive Responses. As in the primary analysis, intellectual humility varied significantly by measurement phase ($F(2, 314) = 63.99, p < .0001, R^2 = 29.0\%$), perceived partner acceptance ($F(1, 837) = 26.83, p < .0001, R^2 = 3.1\%$), and an interaction between phase and perceived partner acceptance ($F(2, 585) = 4.69, p = .010, R^2 = 1.6\%$). To the extent that people perceived greater acceptance from their conversation partner, they showed greater increases in intellectual humility from pre to post ($b = 0.25, SE = 0.08, t(867) = 3.05, p = .002, R^2 = 1.1\%$) but not from pre to follow-up ($b = 0.17, SE = 0.11, t(444) = 1.49, p = .14, R^2 = 0.5\%$).

Second Sensitivity Analysis: Incorporating Both Partners' Age, Race, and Gender.

As in the primary analysis, intellectual humility varied significantly by measurement phase ($F(2, 293) = 57.21, p < .0001, R^2 = 28.1\%$), perceived partner acceptance ($F(1, 761) = 46.53, p < .0001, R^2 = 5.7\%$), and an interaction between phase and perceived partner acceptance ($F(2, 551) = 7.82, p = .004, R^2 = 2.8\%$). To the extent that people perceived greater acceptance from their conversation partner, they showed greater increases in intellectual humility from pre to post ($b = 0.34, SE = 0.08, t(823) = 3.96, p < .0001, R^2 = 1.9\%$) but not from pre to follow-up ($b = 0.16, SE = 0.10, t(423) = 1.53, p = .13, R^2 = 0.6\%$).

Third Sensitivity Analysis: Incorporating Both Partners' Ideology. As in the primary analysis, intellectual humility varied significantly by measurement phase ($F(2, 176) = 37.24, p < .0001, R^2 = 29.7\%$), perceived partner acceptance ($F(1, 475) = 22.89, p < .0001, R^2 = 4.6\%$), and an interaction between phase and perceived partner acceptance ($F(2, 311) = 2.94, p = .054, R^2 = 1.9\%$). To the extent that people perceived greater acceptance from their conversation partner, they showed greater increases in intellectual humility from pre to post (though this association was not significant; $b = 0.18, SE = 0.11, t(531) = 1.64, p = .10, R^2 = 0.5\%$) and from pre to follow-up ($b = 0.28, SE = 0.12, t(255) = 2.36, p = .0013, R^2 = 2.1\%$).

Trust of Partner

First Sensitivity Analysis: Excluding Repetitive Responses. As in the primary analysis, intellectual humility varied significantly by measurement phase ($F(2, 315) = 64.83, p < .0001, R^2 = 29.0\%$), trust of one's partner ($F(1, 802) = 25.34, p < .0001, R^2 = 3.1\%$), and an interaction between phase and trust of one's partner ($F(2, 555) = 4.75, p = .009, R^2 = 1.7\%$). To the extent that people perceived greater trust of their conversation partner, they showed greater increases in

intellectual humility from pre to post ($b = 0.22$, $SE = 0.07$, $t(856) = 2.99$, $p = .003$, $R^2 = 1.0\%$) and from pre to follow-up ($b = 0.18$, $SE = 0.09$, $t(431) = 1.93$, $p = .054$, $R^2 = 0.8\%$).

Second Sensitivity Analysis: Incorporating Both Partners' Age, Race, and Gender.

As in the primary analysis, intellectual humility varied significantly by measurement phase ($F(2, 293) = 57.86$, $p < .0001$, $R^2 = 28.3\%$), trust of one's partner ($F(1, 742) = 42.20$, $p < .0001$, $R^2 = 5.4\%$), and an interaction between phase and trust of one's partner ($F(2, 529) = 7.51$, $p < .001$, $R^2 = 2.8\%$). To the extent that people perceived greater trust of their conversation partner, they showed greater increases in intellectual humility from pre to post ($b = 0.27$, $SE = 0.07$, $t(804) = 3.83$, $p = .0001$, $R^2 = 1.8\%$) and from pre to follow-up ($b = 0.18$, $SE = 0.09$, $t(401) = 2.05$, $p = .04$, $R^2 = 1.0\%$).

Third Sensitivity Analysis: Incorporating Both Partners' Ideology. As in the primary analysis, intellectual humility varied significantly by measurement phase ($F(2, 176) = 38.00$, $p < .0001$, $R^2 = 30.2\%$), trust of one's partner ($F(1, 441) = 21.82$, $p < .0001$, $R^2 = 4.7\%$), and an interaction between phase and trust of one's partner ($F(2, 276) = 4.46$, $p = .012$, $R^2 = 3.1\%$). To the extent that people perceived greater trust of their conversation partner, they showed greater increases in intellectual humility from pre to post ($b = 0.19$, $SE = 0.10$, $t(513) = 2.03$, $p = .043$, $R^2 = 0.8\%$) and from pre to follow-up ($b = 0.28$, $SE = 0.10$, $t(217) = 2.90$, $p = .004$, $R^2 = 3.7\%$).

Additional Analyses

In the following sets of analyses, we report additional analyses that were requested by reviewers. We present them here for interested readers with similar questions.

Do Initial Levels of Intellectual Humility Predict Affiliative Perceptions?

In the following analyses, we examined whether initial levels of intellectual humility (1) statistically predict initial levels of affiliative perceptions (measured after the first conversation),

(2) moderate linear changes in affiliative perceptions over time, and (3) moderate non-linear (quadratic) changes in affiliative perceptions over time. We specified a random intercept for each group, allowing for a different intercept from group to group. We used the residual error matrix to adjust for nonindependence in outcomes between conversations within-person and for nonindependence between dyad members. For each analysis, we estimated four residual variances (one for each conversation); six within-person, between-conversation covariances (constrained to be the same for both dyad members); four between-person, within-conversation covariances; and six between-person, between-conversation covariances (constrained to be the same for both dyad members). We also ran models with a different approach for dealing with nonindependence. In these models, we estimated a random intercept for group, a random intercept for dyad within group, and a first-order autoregressive structure for the residuals within person over time (we were not able to estimate any random slopes). The results were consistent across both approaches; we report the results from the first approach.

Potential for Friendship. Initial intellectual humility did not predict potential for friendship after the first conversation, $F(1, 912) = 0.80, p = .37$. Initial intellectual humility also did not moderate linear changes in potential for friendship across the four conversations, $F(1, 896) = 0.63, p = .43$, nor quadratic changes in potential for friendship across the four conversations, $F(1, 904) = 0.52, p = .47$.

Perceived Partner Acceptance. Initial intellectual humility did not predict perceived partner acceptance after the first conversation, $F(1, 932) = 2.93, p = .088$, though the association was close to the conventional cutoff for statistical significance and was in the positive direction. Initial intellectual humility did not moderate linear changes in perceived partner acceptance

across the four conversations, $F(1, 910) = 1.45, p = .23$, nor quadratic changes in perceived partner acceptance across the four conversations, $F(1, 902) = 2.43, p = .12$.

Trust of Partner. Initial intellectual humility did not predict trust of one's partner after the first conversation, $F(1, 919) = 1.33, p = .25$. Initial intellectual humility also did not moderate linear changes in trust of one's partner across the four conversations, $F(1, 909) = 1.38, p = .24$, nor quadratic changes in trust of one's partner across the four conversations, $F(1, 899) = 2.11, p = .15$.

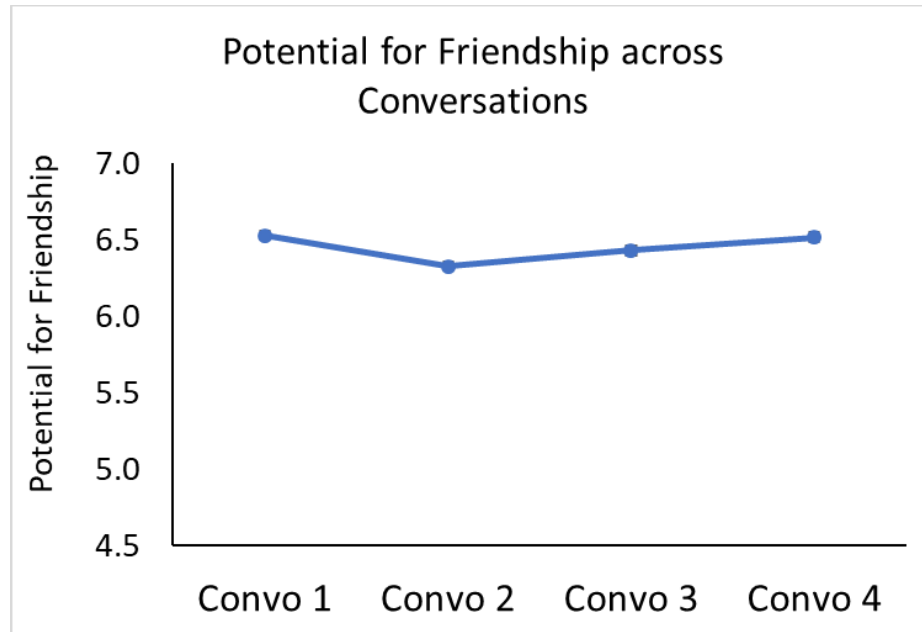
Do Affiliative Perceptions Change Over Time?

In the following analyses, we examined whether affiliative perceptions changed over time in linear and non-linear (quadratic) patterns. We specified a random intercept for each group, and we used the residual error matrix to adjust for nonindependence in outcomes between conversations within-person and for nonindependence between dyad members. For each analysis, we estimated four residual variances (one for each conversation); six within-person, between-conversation covariances (constrained to be the same for both dyad members); four between-person, within-conversation covariances; and six between-person, between-conversation covariances (constrained to be the same for both dyad members). We also ran models with a different approach for dealing with nonindependence. In these models, we estimated a random intercept for group, a random intercept for dyad within group, and a first-order autoregressive structure for the residuals within person over time (we were not able to estimate any random slopes). The results were consistent across both approaches; we report the results from the first approach.

Potential for Friendship. The linear effect of time was significant, $b = -0.18$, $SE = 0.03$, $t(462) = -5.92$, $p < .001$, and this was qualified by a significant quadratic effect of time, as well, $b = 0.06$, $SE = 0.01$, $t(465) = 6.66$, $p < .001$ (see Figure S1).

Figure S1

Changes in Potential for Friendship across Conversations

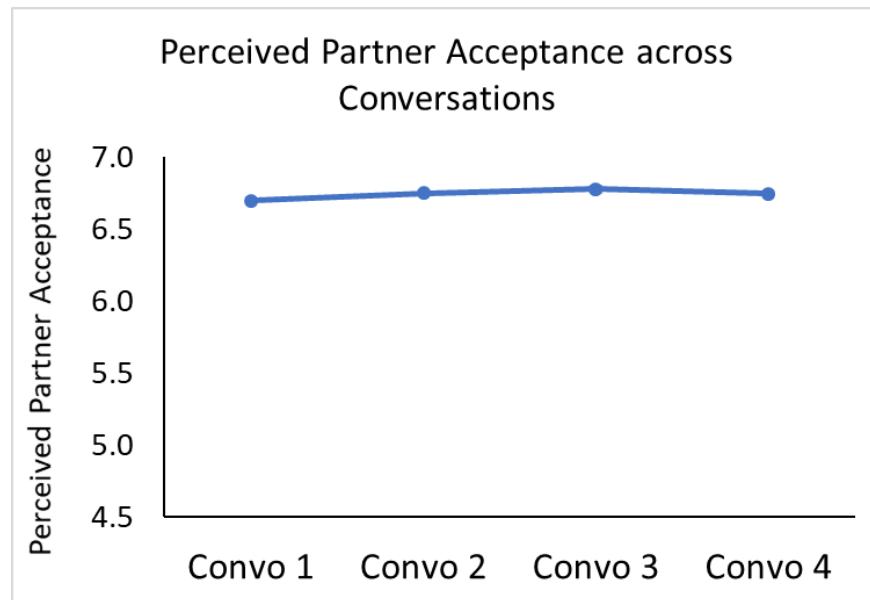


Note. The figure displays means. Error bars, which indicate plus/minus one standard error from the mean, are not visible because the standard errors are so small. The scale for potential for friendship ranged from 1 to 7.

Perceived Partner Acceptance. The linear effect of time was significant, $b = 0.08$, $SE = 0.02$, $t(468) = 3.76$, $p < .001$, and this was qualified by a significant quadratic effect of time, as well, $b = -0.01$, $SE = 0.01$, $t(466) = -3.08$, $p = .002$ (see Figure S2).

Figure S2

Changes in Perceived Partner Acceptance across Conversations

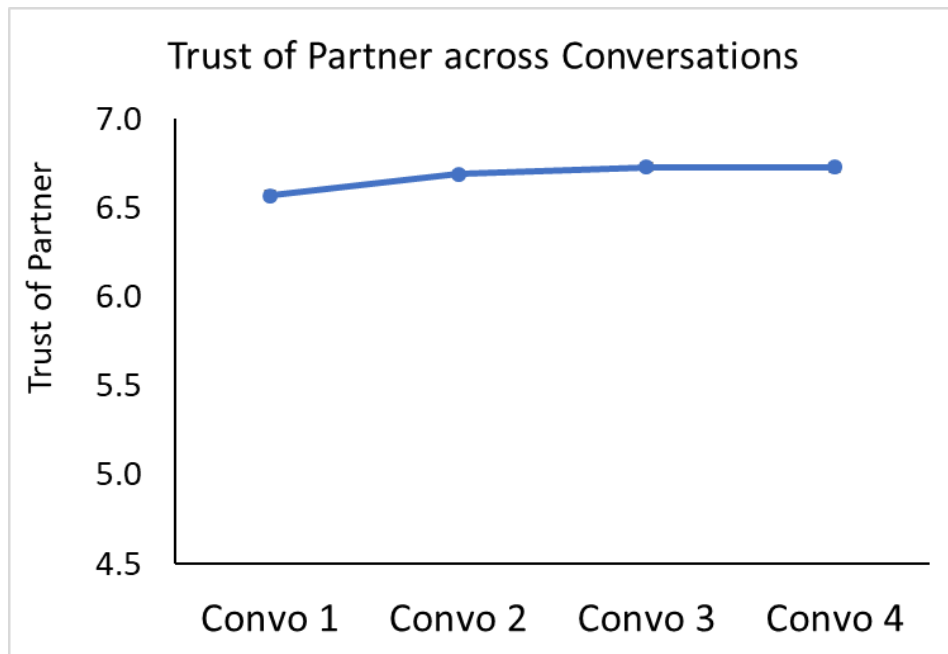


Note. The figure displays means. Error bars, which indicate plus/minus one standard error from the mean, are not visible because the standard errors are so small. The scale for perceived partner acceptance ranged from 1 to 7.

Trust of Partner. The linear effect of time was significant, $b = 0.14$, $SE = 0.02$, $t(468) = 5.99$, $p < .001$, and this was qualified by a significant quadratic effect of time, as well, $b = -0.03$, $SE = 0.01$, $t(465) = -4.24$, $p < .001$ (see Figure S3).

Figure S3

Changes in Trust of One's Partner across Conversations



Note. The figure displays means. Error bars, which indicate plus/minus one standard error from the mean, are not visible because the standard errors are so small. The scale for trust of partner ranged from 1 to 7.

Do Changes in Affiliative Perceptions Moderate Changes in Intellectual Humility Over Time?

Here, we examined whether changes in affiliative perceptions from the first to the last conversations moderated changes in intellectual humility across the three measurement phases (pre, post, and follow-up), while adjusting for mean levels of affiliative perceptions and their changes over time. The main effects for mean levels of affiliative perceptions and interactions between affiliative perceptions and phase all remained consistent with those reported in the main text so we do not repeat them here.

Potential for Friendship. Intellectual humility did not vary significantly by changes in the potential for friendship ($F(1, 747) = 0.81, p = .37$) but it did vary by an interaction between phase and changes in the potential for friendship ($F(2, 553) = 3.06, p = .048$). Follow-up analyses showed that when people experienced more positive changes in perceptions of the potential for friendship with their conversation partner, they also showed greater increases in intellectual humility from pre to post ($b = 0.11, SE = 0.04, t(828) = 2.48, p = .01, 95\% \text{ CI: } 0.02 \text{ to } 0.20$) but not from pre to follow-up ($b = 0.06, SE = 0.05, t(463) = 1.24, p = .21, 95\% \text{ CI: } -0.04 \text{ to } 0.17$)

Perceived Partner Acceptance. Intellectual humility did not vary significantly by changes in perceived partner acceptance ($F(1, 799) = 1.19, p = .28$) but it did vary by an interaction between phase and changes in perceived partner acceptance ($F(2, 566) = 9.91, p < .001$). Follow-up analyses showed that when people experienced more positive changes in perceived partner acceptance, they also showed greater increases in intellectual humility from pre to post ($b = 0.27, SE = 0.06, t(815) = 4.45, p < .001, 95\% \text{ CI: } 0.15 \text{ to } 0.39$) and from pre to follow-up ($b = 0.17, SE = 0.08, t(451) = 2.12, p = .034, 95\% \text{ CI: } 0.013 \text{ to } 0.33$).

Trust of One's Partner. Intellectual humility did not vary significantly by changes in trust of one's partner ($F(1, 770) = 2.56, p = .11$) but it did vary by an interaction between phase and changes in trust of one's partner ($F(2, 554) = 5.55, p = .004$). Follow-up analyses showed that when people experienced more positive changes in trust of one's partner, they also showed greater increases in intellectual humility from pre to post ($b = 0.17, SE = 0.05, t(818) = 3.34, p < .001, 95\% \text{ CI: } 0.07 \text{ to } 0.27$) and from pre to follow-up ($b = 0.09, SE = 0.06, t(459) = 1.52, p = .12, 95\% \text{ CI: } -0.03 \text{ to } 0.22$).

Is Ideological Dissimilarity Between Partners Associated with Changes in Intellectual Humility Over Time?

In the analyses included below, the ideology of both partners was included in the model, as well as the absolute difference between both partners' ideology. Analyses below report moderations by the dyadic difference in ideology.

Changes in Intellectual Humility Over Time. Ideological dissimilarity between partners significantly moderated changes in intellectual humility over time, $F(2, 190) = 3.17, p = .04$. Follow-up contrasts showed that the change in intellectual humility from pre to post was not significantly moderated by ideological dissimilarity, $b = 0.06, SE = 0.04, t(271) = 1.59, p = .11$, but that the change from pre to follow-up was significantly moderated by ideological dissimilarity, $b = 0.10, SE = 0.04, t(155) = 2.45, p = .015$. When people experienced greater ideological dissimilarity with their conversation partner, they also reported greater increases in intellectual humility from pre to follow-up.

Moderation of Changes in Intellectual Humility Over Time by Affiliative Perceptions. The moderating effects of affiliative perceptions on changes in intellectual humility over time were not moderated by ideological dissimilarity between partners. In other words, it does not appear that affiliative perceptions play a stronger role in influencing intellectual humility for partners who are ideologically dissimilar versus similar. The three-way interaction between potential for friendship, ideological dissimilarity, and phase was nonsignificant, $F(2, 315) = 0.45, p = .64$. The three-way interaction between perceived partner acceptance, ideological dissimilarity, and phase was nonsignificant, $F(2, 319) = 0.15, p = .86$. The three-way interaction between trust of one's partner, ideological dissimilarity, and phase was nonsignificant, $F(2, 303) = 0.09, p = .91$.