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Underestimating Counterparts' Learning Goals Impairs Conflictual Conversations

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Abstract

Given the many contexts in which people have difficulty engaging with views that disagree with their own—from political discussions to workplace conflicts—it is critical to understand how conflictual conversations can be improved. Whereas previous work has focused on strategies to change individual-level mindsets (e.g., encouraging open-mindedness), the present study investigated the role of partners' beliefs about their counterparts. Across seven preregistered studies (N = 2,614 adults), people consistently underestimated how willing disagreeing counterparts were to learn about opposing views (compared with how willing participants were themselves and how willing they believed agreeing others would be). Further, this belief strongly predicted greater derogation of attitude opponents and more negative expectations for conflictual conversations. Critically, in both American partisan politics and the Israeli-Palestinian conflict, a short informational intervention that increased beliefs that disagreeing counterparts were willing to learn about one's views decreased derogation and increased willingness to engage in the future. We built on research recognizing the power of the situation to highlight a fruitful new focus for conflict research.

Keywords

attitude conflict, goals, self–other difference, affective polarization, conversations, open data, open materials, preregistered

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Dislike, disrespect, and distrust toward holders of opposing ideological views, or affective polarization, have recently surpassed previously documented levels (Finkel et al., 2020; Iyengar et al., 2019). From policy arguments to workplace disagreements to scientific debates, engagement with opposing ideas devolves into attitude conflict, often causing relational harm (Kennedy & Pronin, 2008; Schroeder et al., 2017; for a review, see Minson & Dorison, 2021).

Given that communication between opponents is a precondition for solving important social problems, researchers have sought to improve conflictual dialogue by fostering a focus on learning. Thus, partisans have been encouraged to "consider the opposite" (Lord et al., 1984), ask elaboration questions (Chen et al., 2010), take the perspective of out-group members (Bruneau & Saxe, 2012; Todd & Galinsky, 2014), use open-minded thinking (J. Baron, 2019), and be receptive to opposing views (Minson et al., 2020). Here, we suggest that a complementary focus on individuals' beliefs about their counterparts' learning goals can prove useful.

Goals in Conflictual Conversations

Goals are desired end points that guide behavior (Dweck & Elliott, 1983; Fishbach & Ferguson, 2007; Gollwitzer & Oettingen, 1998). Only recently have scholars considered the interpersonal nature of goals (see Fitzsimons & van Dellen, 2015), and little is known about their role in conflictual conversations.

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Prior work proposed two broad categories of goals in disagreement. Judd (1978) suggested that parties strive either to demonstrate that their attitude is correct (competitive orientation) or to learn more about the issue (cooperative orientation). Relatedly, mediation practitioners distinguish between advocacy (arguing for one's views) and inquiry (soliciting additional input) mindsets (Garvin & Roberto, 2001; Lee, 2018). Here, we refer to these as *persuasion goals* and *learning goals*, respectively.

Prior research suggests that beliefs about counterparts' learning goals in particular may powerfully shape conversations. People want to be understood (Swann, 2011) and validated (Reis & Patrick, 1996). Active listening—a communication style conveying a desire to learn from the speaker—is a key therapeutic skill (Rogers & Farson, 2021). When people discuss difficult topics, feeling heard increases self-esteem and open-mindedness (Itzchakov et al., 2020; Voelkel et al., 2021). When other individuals convey an interest in learning through engaged listening, speakers feel supported and accepted. By contrast, although people respond poorly to persuasion attempts (Friedstad & Wright, 1994; Koslow, 2000), there is no evidence that the absence of persuasion dramatically improves interpersonal outcomes. Thus, we predicted that believing that a counterpart holds learning goals will lead to more positive evaluations of, and experiences with, that counterpart during attitude conflict.

Accuracy and Inaccuracy in Goal Perception

Prior work has demonstrated that parties in conflict regularly misjudge opponents (Ahler & Sood, 2018; Moore-Berg et al., 2020). Counterparts systematically overestimate how much out-group members' views differ from their own (i.e., false polarization; Fernbach & Van Boven, 2022) and how negatively out-group members view the in-group (Lees & Cikara, 2020; Ruggeri et al., 2021). Such misunderstandings are perhaps not surprising considering people's tendency to derogate out-group members' intelligence, motives, perspective taking, and even basic humanity (Brandt & Crawford, 2020; Minson et al., 2020; Schroeder et al., 2017).

Importantly, being willing to learn requires counterparts to have benevolent intent and sophisticated perspective taking—the very qualities we refuse to acknowledge in opponents. Furthermore, learning goals are difficult to evaluate: If a counterpart is listening silently, how can we know whether they are learning about our perspective or generating counterarguments? By contrast, persuasion goals are more clearly signaled by the presence of counterarguments. Building on this work, we hypothesized that, on average, partisans believe their counterparts to be less willing to learn about their views than is actually the case. The same misestimation, however, is not likely to extend to persuasion goals that are more easily perceived.

Statement of Relevance

Recent years have witnessed marked increases in levels of antipathy between holders of opposing views—in politics as well as workplace interactions, in the United States as well as globally. Opposing parties seem unable to communicate across their differences, and dialogue attempts often devolve into conflict and harming relationships. Our research indicates that when people believe that a conflict counterpart is willing to learn about their views, animus is reduced and interpersonal evaluations as well as willingness to interact in the future are enhanced. This effect persists in contexts in which parties have strongly held beliefs, such as U.S. partisan politics and the Israeli-Palestinian conflict. We suggest a simple and scalable intervention to improve communication between holders of opposing views: expressing one's willingness to learn about each other. This intervention reduces barriers to conflict and opens the door to conversations between holders of opposing views.

Intervening in Conflict by Recalibrating Goal Perceptions

Informational interventions can effectively reduce misperceptions during attitude conflict (Dorison et al., 2019; Lees & Cikara, 2020; Moore-Berg et al., 2020; Ruggeri et al., 2021). Furthermore, the benefits of shifting (miscalibrated) perceptions have also been demonstrated in applied settings (Fishkin et al., 2019). For example, the nonprofit organization Braver Angels brings together liberals and conservatives in a learning-focused environment designed for increasing partisans' insights about each other. An overwhelming majority of participants report high levels of mutual understanding and empathy after the workshops (Jacobs et al., 2019; for experimental evidence, see also H. Baron et al., 2022). Building on this prior work, we hypothesized that informing participants that their counterpart is open to learning about their views would improve both interpersonal evaluations and actual conversational experiences.

The Present Research

We tested three interrelated hypotheses across seven preregistered studies ($N = 2{,}614$). Studies 1a to 1c tested whether disagreeing participants underestimated the extent to which their counterpart was willing to learn about their perspective (across multiple domains). Study 2 tested whether perceptions about counterparts' learning goals drove affective polarization and evaluations of a conflictual conversation in the context of the 2020 U.S. presidential election. Finally, Studies 3 to 5 tested whether manipulating perceived learning goals improved conflict outcomes in American partisan politics and the Israeli-Palestinian conflict. For all of the studies, we report how we determined sample sizes, all data exclusions, all manipulations, and all measures (Simmons et al., 2012). Data, materials, preregistrations, and code for all studies are available at https://researchbox.org/372. All methods were approved by the Harvard University Institutional Review Board.

Study 1a

Method

In Study 1a, we investigated the goals that people endorsed when interacting with holders of opposing views (across multiple domains of attitude conflict) and compared these with ones that individuals believed their counterparts endorsed. We theorized that whereas participants would systematically underestimate the learning goals held by counterparts, this same pattern would not persist for persuasion goals.

Participants. To achieve 90% power on the basis of effect-size estimates from a pilot study, we recruited 600 participants through Amazon's Mechanical Turk (MTurk) to complete a 5-min survey in which they provided open-ended descriptions of the goals that they and their counterparts pursue in conflictual conversations. First, participants reported their interest in several topics (e.g., Broadway musicals, trivia-game shows) on a scale from 1 (*not at all*) to 5 (*extremely*). As per our preregistration, only participants who reported having a strong interest (reporting either 4, *very*, or 5, *extremely*) in political news, National Basketball Association (NBA) basketball, National Football League (NFL) football, or Major League Baseball (MLB) baseball were eligible to complete the rest of the survey. Although our main practical interest was in political disagreements, we chose to recruit sports fans to test whether our effects would generalize to another context in which individuals have strong attitudes. This resulted in a final sample of 201 participants (39% female; mean age = 33 years).

Protocol. Depending on self-reported interest in each topic, participants imagined having a 5-min conversation with someone from the opposite side of the political spectrum ($n = 100$) or someone they disagreed with about the best team in a professional sports league ($n = 101$). Participants were assigned to imagine a conversation on the topic in which they reported having a strong interest (reporting either 4, *very*, or 5, *extremely*), and any participant who indicated a strong interest in multiple topics was randomly assigned to one topic. Participants in the politics group were told to imagine having a conversation with someone from the "opposite side of the political spectrum." Participants who considered a conversation about sports imagined talking to someone who disagreed with them about which team was the best in the league.

We then randomly assigned each participant to report either their own goals (self condition; $n = 101$) or their partner's goals (other condition; $n = 100$) during this conversation. Participants wrote up to five goals that they (or their partner, depending on condition) would have during the conversation, using open-ended text boxes. Participants generated a total of 960 goals. Finally, participants provided basic demographic information, including their age and gender.

Coding. We coded participants' open-ended responses according to the following preregistered process. First, one coder examined the data and removed any responses that were nonsensical or unrelated to having a conversation with a disagreeing other (e.g., "Buy an RV"; 104 goals excluded). Next, this coder was joined by a second coder to read and classify each goal as belonging to one of three categories according to a predetermined coding rubric, based on prior research (Garvin & Roberto, 2001; Judd, 1978; Lee, 2018): learning goals, persuasion goals, or miscellaneous goals. We had substantial agreement between coders, as indicated by 80% ($n = 767$) agreement. To factor in the level of agreement due to chance, we calculated a Cohen's unweighted κ of .67 (95% confidence interval [CI] = [.63, .71]), which indicated a substantial level of agreement (Altman, 1990). A third coder then read and classified the remaining 193 goals on which the first two coders did not agree. For 88% ($n = 170$) of these goals, the third coder provided a code that agreed with that of one of the first two coders, which was then retained as the final categorization for these goals. The remaining 23 goals were read and classified by a fourth coder, and the most common classification produced by the four coders was considered final. All coders were blind to the hypotheses.

After each goal was coded as belonging to a unique category, we calculated three dependent variables for each participant: (a) proportion of learning goals

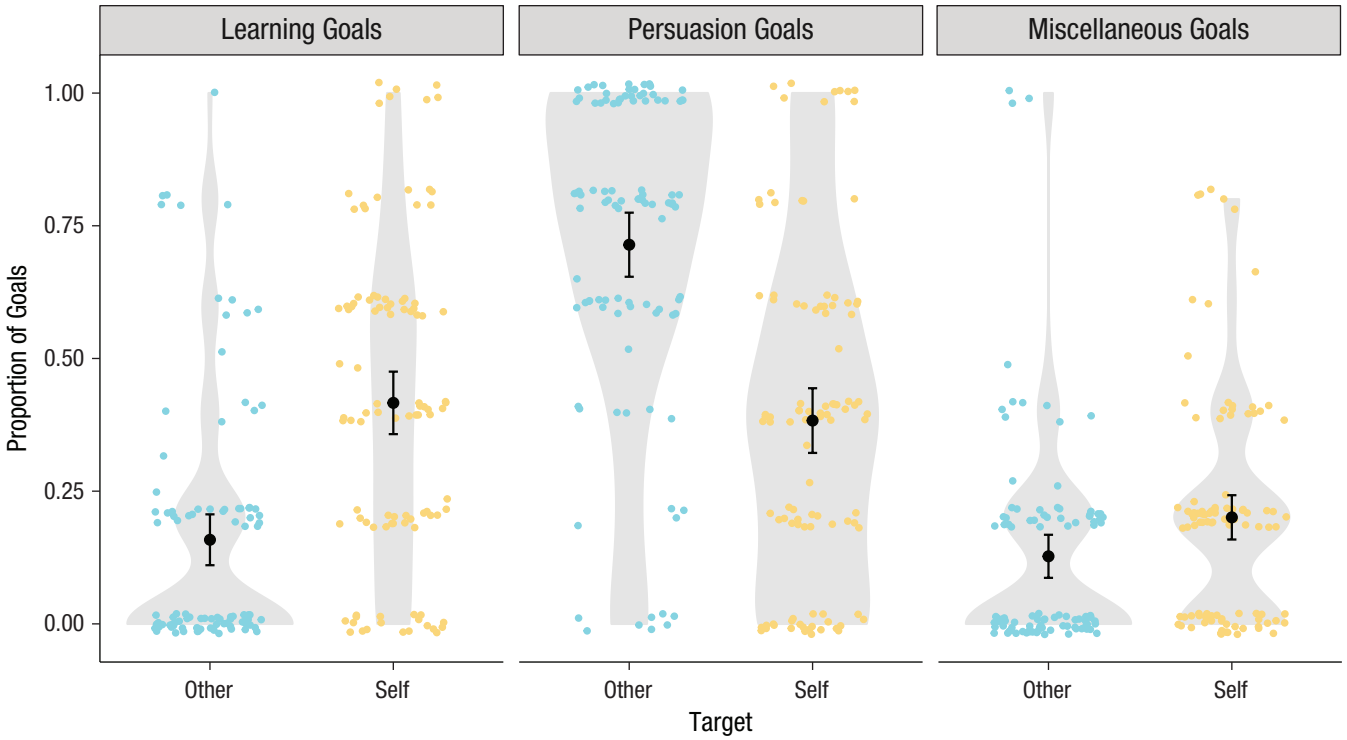


Fig. 1. Proportion of conversational learning goals, persuasion goals, and miscellaneous goals reported for the self and for a disagreeing other in Study 1a. Shaded areas display distributions. Black dots indicate means, and error bars represent 95% confidence intervals around the means. Colored dots represent individual data.

reported, (b) proportion of persuasion goals reported, and (c) proportion of miscellaneous goals reported.

Results

Most goals reported in both the self and other conditions (79%) fell into the categories of "learning" and "persuasion." Figure 1 presents the proportion of different goal types generated by participants in both conditions. In line with our theorizing, results showed that participants listed dramatically fewer learning goals when considering their counterpart's goals (M = .16, SD = .24), rather than their own goals (M = .42, SD = .30), $t(190.88) = 6.74$, $p < .001$, Cohen's $d = -0.95$, 95% CI = [–1.25, –0.66]. Importantly, this pattern could not be attributed to a broader failure to vividly consider the goals of other people: Participants listed a greater number of persuasion goals for their counterpart (M = .71, SD = .30) than for themselves (M = .38, SD = .31), $t(198) = 7.66$, $p < .001$, Cohen's $d = 1.08$, 95% CI = [0.78, 1.38]. Although we did not predict this reversal for persuasion goals, we will consider it further in the General Discussion. We next ran a 2 × 2 mixed analysis of variance (ANOVA) with one between-subjects factor (other vs. self) and one within-subjects factor (proportion of goals classified as learning vs. proportion of goals classified as persuasion). Critical to our investigation, results of this analysis showed a significant interaction, $F(1, 396) = 103.94$, $p < .001$. Additionally, participants reported a slightly greater proportion of miscellaneous goals for themselves (M = .20, SD = .21) than for their counterpart (M = .13, SD = .20), $t(197.93) = 2.50$, p = .01, Cohen's $d = -0.35$, 95% CI = [–0.63, –0.07].

Finally, we assessed whether the effects documented above depended on the specific context (politics vs. sports). A 2 × 2 mixed ANOVA found a significant interaction between condition (self vs. other) and goal type (learning vs. persuasion) for participants imagining a conversation about sports, $F(1, 198) = 23.20$, $p < .001$, and politics, $F(1, 194) = 108.53$, $p < .001$. Of note, however, we found that the effects persisted in both contexts (Table 1). However, these differences were larger (approximately double in size) when participants imagined a conversation about politics.

Discussion

Individuals underestimated the number of learning-related, but not persuasion-related, goals for conflict counterparts. These effects were greater for participants imagining a conversation about politics than about sports.

Table 1. Effect Sizes From the Comparison of Proportion of Goals in Each Category Reported for the Self Versus a Disagreeing Other, Separately for Each Topic of Attitude Conflict (Study 1a)

Topic	Learning goals	Persuasion goals	Miscellaneous goals
Politics	–1.48 [–1.93, –1.03]	1.49 [1.04, 1.94]	–0.23 [–0.63, 0.17]
Sports	–0.55 [–0.95, –0.15]	0.79 [0.38, 1.20]	–0.48 [–0.88, –0.08]

Note: The table shows Cohen's *d*s (other – self); 95% confidence intervals are given in brackets.

Study 1b

Method

Study 1b tested the same overarching hypotheses as Study 1a with a new sample population (Prolific Academic) and a different response format (Likert items). We again assessed whether, across domains, participants would underestimate counterparts' learning (but not persuasion) goals.

Participants. To achieve 90% power on the basis of effect-size estimates from a pilot study, we recruited 400 participants through Prolific Academic to complete a 3-min survey. Participants again reported their interest in several topics (e.g., Broadway musicals, trivia-game shows) on a scale from 1 (*not at all*) to 5 (*extremely*). As per our preregistration, only participants who reported having a strong interest (reporting 4, *very*, or 5, *extremely*) in political news, NBA basketball, NFL football, or MLB baseball were eligible to complete the rest of the survey. Further, 82 participants who failed our attention check were excluded. This resulted in a final sample of 160 participants (36% female; mean age = 32 years).

Protocol. As in Study 1a, participants imagined having a 5-min conversation with someone they disagreed with about politics (n = 97) or sports (n = 63) on the basis of their self-reported interest in each topic. Any participant who indicated a strong interest in multiple topics was randomly assigned to one topic.

Own goals. Participants reported how important various goals were to them in this conversation on a scale from 1 (*not at all important*) to 5 (*extremely important*). Most critically, participants evaluated three statements pertaining to learning goals: (a) learning about your partner's perspective, (b) understanding your partner's point of view, and (c) hearing evidence for your partner's beliefs (α = .73). In addition, participants evaluated three statements pertaining to persuasion goals: (a) persuading your partner of your point of view, (b) convincing your partner that you are right, and (c) presenting evidence for your point of view (α = .84). The order of all six items was randomized.

Beliefs about partner's goals. Participants were also asked to report "How important would each of these goals be for your partner in this conversation?" using the same items as above (learning goals: α = .51; persuasion goals: α = .93). The order in which participants reported their own goals and their beliefs about their partner's goals during the conversation was counterbalanced; half of the participants first answered all questions about their own goals before answering about their partner, and the other half of participants completed the same two sets of questions in the opposite order.

Results

We again theorized that participants would underestimate their counterparts' learning goals but that this underestimation would not extend to persuasion goals. This theorizing was supported: In line with Study 1a, results showed that participants evaluated learning goals as being less important to their counterparts (M = 3.20, SD = 1.17) than to themselves (M = 4.02, SD = 0.79), $t(159) = 9.69$, $p < .001$, Cohen's $d = -0.81$, 95% CI = [–0.99, –0.62]. Replicating Study 1a, Study 1b showed that this pattern was not matched for persuasion goals: Participants rated persuasion goals as being more important to counterparts (M = 3.92, SD = 0.78) than to themselves (M = 3.62, SD = 0.87), $t(159) = -4.30$, $p < .001$, Cohen's d = 0.36, 95% CI = [0.19, 0.53]. To put these results in perspective, we found that 66% of participants reported higher learning goals for themselves than a disagreeing counterpart (whereas only 12% reported lower learning goals for themselves and only 25% reported the same level for the self and other). Figure 2 presents these results.

To test our primary hypothesis, we ran a mixed-effects model specifying a fixed effect for goal type (learning vs. persuasion) and target (self vs. other) and a random effect for participant to account for repeated measures. In line with our predictions, results showed a significant interaction between goal type and target, $b = -1.13$, 95% CI = [–1.38, –0.87], $p < .001$. These results again revealed that people underestimated the importance of learning goals to their counterparts but did not make the same error for persuasion goals.

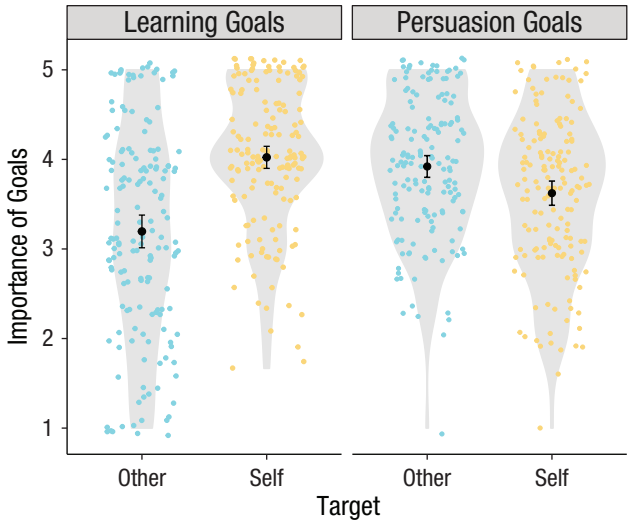


Fig. 2. Rating of the importance of conversational learning and persuasion goals for the self and a disagreeing other in Study 1b. Shaded areas display distributions. Black dots indicate means, and error bars represent 95% confidence intervals around the means. Colored dots represent individual data.

An alternative account of our results may be that individuals have very little insight into the goals of other people and were thus responding randomly, around the midpoint of the scale. However, the fact that they reported significantly higher persuasion than learning goals for counterparts makes this explanation less credible.

Finally, we assessed whether the documented effects above depended on the specific context (politics vs. sports). A mixed-effects model including a random effect for participant found a significant interaction between target (self vs. other) and goal type (learning vs. persuasion) for participants imagining a conversation about sports, $b = -0.75$, 95% CI = [–1.11, –0.40], $p < .001$, and politics, $b = -1.37$, 95% CI = [–1.72, –1.01], $p < .001$. Of note, however, we found that the effects persisted in both contexts (Table 2). However, as in Study 1a, these differences were larger (approximately 1.5 times larger) for participants imagining a conversation about politics than about sports.

Table 2. Effect Sizes From the Comparison of Importance of Goals in Each Category Reported for the Self Versus a Disagreeing Other, Separately for Each Topic of Attitude Conflict (Study 1b)

Topic	Learning goals	Persuasion goals
Politics	–0.89 [–1.14, –0.65]	0.43 [0.19, 0.67]
Sports	–0.65 [–0.93, –0.36]	0.25 [0.02, 0.48]

Note: The table shows Cohen's *d*s (other – self); 95% confidence intervals are given in brackets.

Discussion

Study 1b replicated Study 1a with a new response format and new participant sample.

Study 1c

Method

In Study 1c, we assessed whether the self–other difference observed in Studies 1a and 1b extends to all other individuals (including both agreeing and disagreeing others) or whether disagreement is required. Thus, we added a new condition in which participants imagined observing a conflictual conversation (rather than engaging in one) between someone who agreed with them on an issue and someone who disagreed with them.

Participants. To achieve 90% power on the basis of effect-size estimates from Studies 1a and 1b, we recruited 700 participants through Prolific Academic to participate in a 3-min study. As before, participants reported the extent to which they cared about several topics. Following our preregistration, we excluded 380 participants who did not have a strong interest in political news, NBA basketball, NFL football, or MLB baseball. This resulted in a final sample of 320 participants (38% female; mean age = 34 years), all of whom passed our attention check.

Protocol. Each participant was asked to imagine a conflictual conversation on one of two topics: politics (n = 139) or sports (n = 181). Each participant was randomly assigned to one of three conditions, which varied according to the target whose goals participants considered: self, disagreeing other, or agreeing other. In the self and disagreeing-other conditions, participants completed the same task as in Studies 1a and 1b: They imagined engaging in a conversation with someone who disagreed with them on their assigned topic and evaluated the importance of various goals either to themselves (in the self condition) or to the disagreeing other. In the agreeing-other condition, participants were instead asked to imagine that they were watching this conversation between two people who disagreed with each other on their assigned topic. Participants were told that one of the individuals in the conversation agreed with their own point of view, whereas the other individual disagreed. In this condition, participants evaluated the importance of various goals to the agreeing other in this conversation.

Using the same items as in Study 1b, participants evaluated the importance of three items pertaining to persuasion goals ($\alpha = .71$) and three items pertaining to learning goals ($\alpha = .90$). All items were presented in random order.

Results

We first assessed whether we replicated the pattern of results from Studies 1a and 1b. This was in fact the case: In line with our prior findings, results showed that participants again underestimated the importance of learning goals to a disagreeing other (M = 3.22, SD = 1.10), relative to themselves (M = 3.90, SD = 0.85), $t(204.48) = 5.09$, $p < .001$, Cohen's $d = 0.69$, 95% CI = [0.41, 0.97]. Additionally, participants overestimated the importance of persuasion goals to a disagreeing other (M = 3.84, SD = 0.80) relative to themselves (M = 3.55, SD = 1.00), $t(198.60) = 2.34$, $p = .02$, Cohen's $d = -0.32$, 95% CI = [–0.59, –0.05]. We again observed a significant interaction effect between goal type (learning vs. persuasion) and target (self vs. disagreeing other), $b = -0.97$, 95% CI = [–1.33, –0.61], $p < .001$.

Next, we considered the relative importance of learning goals that participants attribute to the self, relative to an agreeing other. Our key question was whether agreeing counterparts would be perceived more similarly to the self (suggesting that disagreement is required for the self–other difference to occur) or more similarly to disagreeing counterparts (suggesting that the self–other difference is robust across levels of agreement). We found relatively greater support for the former hypothesis. First, we found a small and only marginally significant difference in the importance of learning goals that participants reported for themselves (M = 3.90, SD = 0.85) compared with an agreeing other (M = 3.68, SD = 0.96), $t(205.02) = 1.82$, $p = .07$, Cohen's $d = -0.25$, 95% CI = [–0.52, 0.02]. Thus, agreeing others were not seen as holding goals identical to participants' own. However, we also found that participants reported learning goals to be more important to an agreeing other (M = 3.68, SD = 0.96) compared with a disagreeing other (M = 3.22, SD = 1.10), $t(211.42) = 3.22$, $p = .001$, Cohen's $d = -0.44$, 95% CI = [–0.71, –0.17]. To put these results in perspective, we found that agreeing others are perceived more similarly to the self (self: M = 3.90, agreeing other: M = 3.68; mean difference = 0.22) than to disagreeing others (agreeing other: M = 3.68, disagreeing other: M = 3.22; mean difference = 0.44).

When we turned to examining persuasion goals, we found that participants reported those to be less important to themselves (M = 3.55, SD = 1.00) compared with an agreeing other (M = 4.07, SD = 0.66), $t(180.27) = 4.42$, $p < .001$, Cohen's $d = 0.61$, 95% CI = [0.33, 0.89]. Surprisingly, and in contrast to the pattern of results for learning goals above, results showed that participants reported persuasion goals to be more important to an agreeing other than to a disagreeing other (M = 3.84, SD = 0.80), $t(208.98) = 2.28$, Cohen's $d = 0.31$, 95% CI = [0.04, 0.58]. Figure 3 presents these data.

Taken together, whereas participants believed that disagreeing others were less willing to learn than agreeing others, they also believed that disagreeing others placed less importance on persuasion. Thus, the

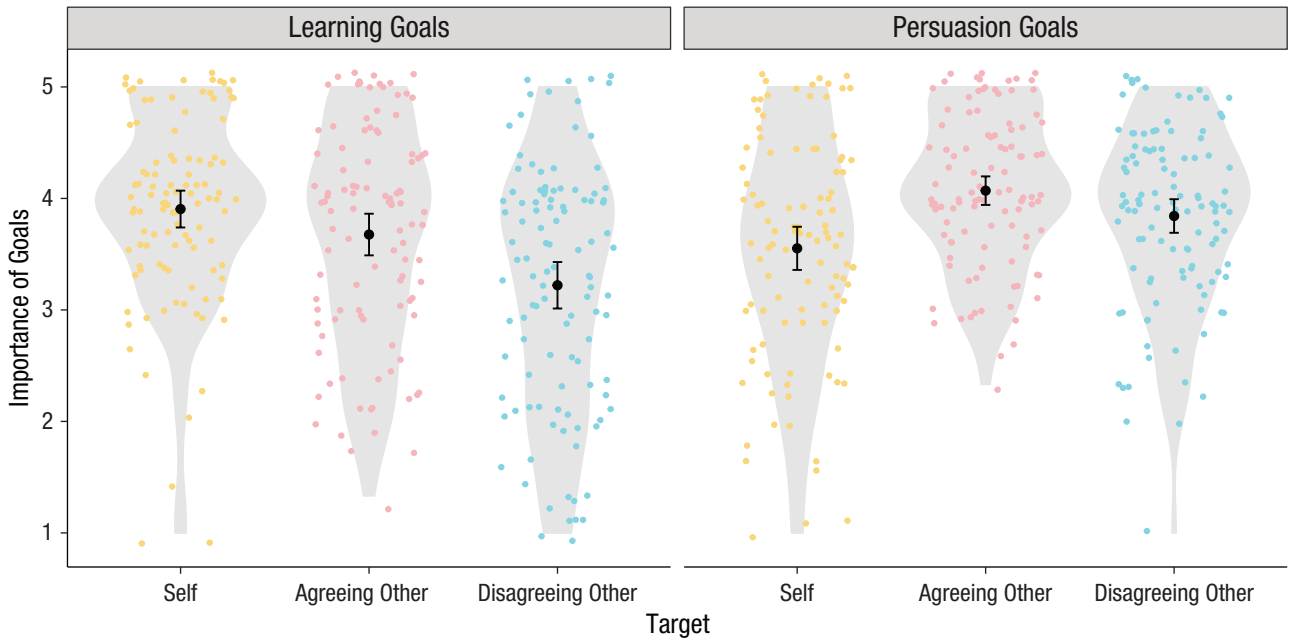


Fig. 3. Rating of the importance of conversational learning and persuasion goals for the self, an agreeing other, and a disagreeing other in Study 1c. Shaded areas display distributions. Black dots indicate means, and error bars represent 95% confidence intervals around the means. Colored dots represent individual data.

Table 3. Effect Sizes From the Comparison of Importance of Goals in Each Category Reported for the Self, an Agreeing Other, and a Disagreeing Other, Separately for Each Topic of Discussion (Study 1c)

Comparison and topic	Learning goals	Persuasion goals
Self vs. disagreeing other		
Politics	–1.06 [–1.52, –0.60]	0.66 [0.22, 1.10]
Sports	–0.57 [–0.98, –0.16]	0.09 [–0.31, 0.49]
Self vs. agreeing other		
Politics	–0.27 [–0.70, 0.16]	0.75 [0.31, 1.18]
Sports	–0.37 [–0.79, 0.05]	0.49 [0.07, 0.92]
Agreeing other vs. disagreeing other		
Politics	–0.83 [–1.24, –0.41]	–0.04 [–0.44, 0.35]
Sports	–0.19 [–0.61, 0.23]	–0.51 [–0.93, –0.09]

Note: The table shows Cohen's *d*s (other – self); 95% confidence intervals are given in brackets.

self–other difference in learning goals revealed in Studies 1a and 1b appeared to be driven primarily by disagreement: Disagreeing others were believed to be particularly unwilling to learn, even compared with agreeing others (although participants did believe themselves to be slightly more willing to learn than even an agreeing other). Intriguingly, the self–other difference in persuasion goals appeared to be robust across levels of agreement: Agreeing others were believed to be even more focused on persuasion than disagreeing others. Finally, we again found that whereas our effects persisted across domains, they were stronger for politics than for sports (Table 3).

This pattern of results provides evidence that people systematically underestimate the importance of learning goals to disagreeing counterparts—compared with both themselves and an agreeing counterpart—and do so particularly in the context of political disagreements.

Discussion

The underrecognition of disagreeing others' willingness to learn did not stem from a simple self–other difference but, rather, was driven by disagreement—particularly in the political domain. We focused the remainder of our investigation on political-attitude conflict.

Study 2

Method

Study 2 examined whether (a) the self–other difference in learning goals persisted in a more naturalistic setting (i.e., a synchronous conversation regarding a bitterly contested election) and (b) whether perceived learning goals predicted subsequent evaluations of the conversation and counterparts. We theorized that (a) the self–other difference would persist even after participants engaged in (rather than anticipated) a conflictual conversation and (b) perceptions of partners' learning goals would robustly predict conflict outcomes, above and beyond other measures of both a focal participant (i.e., an actor) and their counterpart (i.e., their partner).

Recruitment survey. We recruited individuals through a third-party survey firm to participate in a study regarding the 2020 U.S. presidential election. The study consisted of a prestudy survey (i.e., a recruitment survey) and a main survey 1 week later. Across a 2-month period between September and October 2020, a total of 4,344 participants completed our prestudy survey. Of these, 1,561 participants opened the main survey, and 636 participants were successfully matched with an opposing-party supporter to have a conversation. Our preregistered intention was to collect at least 300 conversations (to achieve 90% power on the basis of effect-size estimates from Studies 1a to 1c, while attending to financial constraints), and we ultimately collected 318 because data collection took place in weekly waves.

Interested participants completed an initial prestudy survey to determine their eligibility. Participants reported who they were most likely to vote for in the upcoming presidential election, the strength of their support for their candidate, and their opposition to the other candidate. They were deemed eligible if they met two criteria: (a) They strongly supported their candidate (≥ 3 on a scale from 0, *not at all*, to 5, *extremely*), and (b) they strongly opposed the other candidate (≥ 3 on a scale from 0, *not at all*, to 5, *extremely*). Eligible participants were asked whether they were willing to complete a 20-min study the following day in which they would have a 10-min chat-based conversation with someone they disagreed with regarding the election. Eligible participants who indicated this willingness were invited to complete our main survey.

Main survey. After reporting whether they were more likely to vote for the Republican candidate (Donald Trump) or Democratic candidate (Joe Biden), participants learned that they would spend the next 10 min talking to someone with opposing voting intentions. We instructed them to spend the time discussing their beliefs about who is the best candidate. Then, participants responded to three questions to test their comprehension of these instructions, asking them about the length of the conversation, who they would be talking to, and the topic. Participants who answered any of these questions incorrectly were provided with another opportunity to answer and were removed from the survey if they answered incorrectly a second time. Finally, we told participants that they would receive a bonus payment if they remained engaged and on topic for the full 10 min.

After the participants received these instructions, we paired each participant with a conversation partner who held opposing voting preferences. We did so via Chatplat, an online platform that allows for real-time, synchronous chat-based conversation. Each voter was paired with an opposing-candidate voter on a first-come, first-served basis. Participants used text-based communication and received a 60-s warning when the chat was about to end. After the conversation, participants responded to several measures regarding their counterpart and the conversation they just had.

Measures. First, participants reflected on their own and their counterpart's goals during the conversation; the target of consideration was counterbalanced. Specifically, participants reported the importance of the same persuasion (three items; $\alpha = .83$) and learning (three items; $\alpha = .73$) goals used in Studies 1b and 1c. This resulted in a total of eight goals (actor vs. partner; self-assessed vs. perceptions of counterpart; learning vs. persuasion). Additionally, participants reported how enjoyable, pleasant, and aversive the conversation was for them (1, *not at all*, to 7, *a lot*; $\alpha = .77$) and evaluated how moral, objective, intelligent, trustworthy, and likeable their partner seemed during the conversation (on separate scales from 1, *extremely* [*immoral/unintelligent/biased/unlikeable/untrustworthy*], to 7, *extremely* [*moral/intelligent/objective/likeable/trustworthy*]; $\alpha = .89$). Finally, participants reported how much, if at all, their position changed during the conversation (–3 = *My position is further from my partner's*, 0 = *My position did not change*, +3 = *My position is closer to my partner's*) and predicted the same for their conversation partner.

Results

After the conclusion of the conversations, 505 participants completed the entirety of our survey. Following our preregistration, a research assistant blind to the hypotheses reviewed all transcripts and identified 367 participants who remained on topic for the entire 10-min conversation. This final sample of 367 participants served as our final data set for analysis ($n = 184$ Republican supporters, $n = 183$ Democratic supporters; 66% female; mean age = 54 years).

Analytic plan. In the analyses that follow, we differentiate between "actors" (the participant whose responses are being considered) and "partners" (their conversation counterpart). Given the dyadic nature of these data, each participant served as both an actor (when they provided their evaluations) and a partner (when their conversation counterpart provided evaluations). Thus, we analyzed our data using mixed-effects models specifying our key variables as fixed effects and including a random effect for group to account for multiple observations of the same conversation (one from each conversation counterpart). Our results are robust to two additional approaches to modeling dyadic data: (a) modeling negative nonindependence in lieu of random effects using the *nlme* package (Version 3.1-108; Pinheiro et al., 2013) in the R programming environment (Version 4.1.2; R Core Team, 2021) and (b) modeling fixed effects, clustering standard errors at the level of the dyad (Yeomans et al., 2019). Full details are available in our code file posted on ResearchBox (https://researchbox.org/372).

Do actors underestimate their partner's learning goals? Our first key question was whether we would replicate the self–other difference in learning goals in a live, synchronous conversation about a hotly contested current event. We did. Specifically, actors reported that learning goals were less important to their partners ($M = 3.34$, $SD = 1.13$) than to themselves ($M = 4.13$, $SD = 0.82$) during the conversation, $b = 0.78$, 95% CI = [0.65, 0.91], $p < .001$. To put these results in perspective, we found that 66% of participants reported higher learning goals for themselves than their conversation partner (whereas only 15% reported lower learning goals for themselves and only 19% reported the same level for themselves and their partner).

Surprisingly, and in contrast to Studies 1a to 1c, results showed that actors also underestimated the importance of persuasion goals to their partner ($M = 3.05$, $SD = 1.00$) relative to themselves ($M = 3.34$, $SD = 0.97$), $b = 0.29$, 95% CI = [0.16, 0.42], $p < .001$—51% of participants reported higher persuasion goals for themselves than their conversation partner (31% reported lower persuasion goals for themselves, and 19% reported the same amount for themselves and their partner).

Although this difference is small, it is nevertheless intriguing. This reversal may be due to the fact that

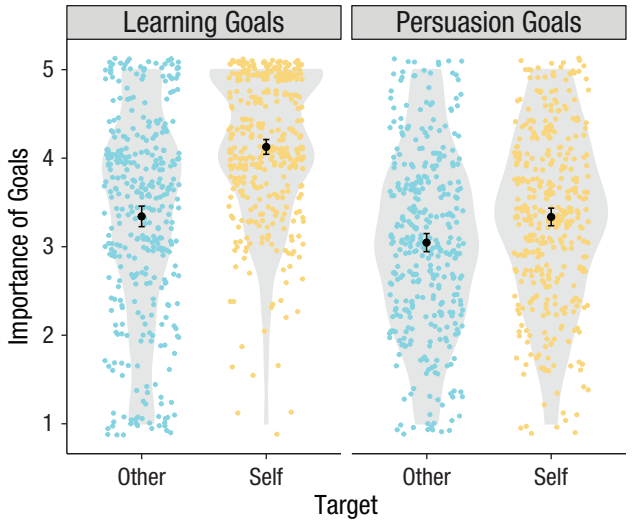


Fig. 4. Rating of the importance of postconversation learning and persuasion goals for the self and a disagreeing counterpart in Study 2. Shaded areas display distributions. Black dots indicate means, and error bars represent 95% confidence intervals around the means. Colored dots represent individual data.

these evaluations were provided after rather than before the conversation. In particular, looking at the means across the earlier studies, we found that self-reported goals as well as perceptions of partners' learning goals remained almost identical when rated before (Studies 1b and 1c) and after (Study 2) the conversation. However, perceptions of partners' persuasion goals—which received the highest ratings when participants anticipated such conversations—decreased when rated after the conversation. It may be that, in line with research on false polarization, participants expected their partners to be more extreme in their views and thus more aggressive in their persuasion attempts, a forecast that experience proved to be erroneous. We will consider this idea further in the General Discussion.

Critically, despite the fact that participants underestimated the persuasion goals held by their conversation partners, we still found a significant interaction between target (other vs. self) and goal type (learning vs. persuasion), $b = 0.50$, 95% CI = [0.32, 0.67], $p < .001$. Figure 4 presents these data, which reveal that participants underestimated their disagreeing counterpart's learning goals to a greater extent than their persuasion goals. Of note, this effect did not differ for Republicans and Democrats (for the full results, see the Supplemental Material available online). Thus, even in the context of a synchronous conversation in which counterparts had already undertaken an entire interaction, they continued to underestimate the learning goals of their partner and did so to a greater extent than they underestimated the persuasion goals of their partner.

What are the consequences of perceived learning goals? Although participants dramatically underestimated their counterpart's desire to learn about their perspective, there was also considerable variance in these perceptions—the standard deviation was 1.13 on a 5-point scale, and ratings spanned the entire length of the scale, with perceived learning goals ranging from 1 to 5.

As described in detail below, results revealed that actors' perceptions of partners' learning goals robustly predicted two key conversational outcomes: actors' evaluations of their partners and actors' conversational enjoyment. To obtain a global measure of actors' evaluations of their partners, we averaged participants' ratings of their partner's objectivity, intelligence, likeability, morality, and trustworthiness ($\alpha = .89$; all results were replicated for each individual dimension of person perception; for details, see the Supplemental Material). We similarly averaged participants' ratings of aversiveness (reverse coded), enjoyment, and pleasantness to obtain a measure of conversational enjoyment ($\alpha = .77$). For each outcome, we took a three-step analytic approach (detailed in Fig. 5), fitting mixed-effects models with a random effect for dyad as well as various fixed effects specified below. We detail all results below and in Table 4.

Actors' perceptions of partners' learning goals. First, we assessed the relationship between perceived learning goals and conflict outcomes. Thus, in Model 1, we predicted conflict outcomes from actors' perceptions of partners' learning goals. Results showed a significant positive relationship between actors' perceptions of partners' learning goals and actors' enjoyment of the conversation, $b = 0.70$, 95% CI = [0.58, 0.81], $p < .001$. Additionally, actors evaluated their conversation partners more positively when they perceived that their partners had greater learning goals, $b = 0.61$, 95% CI = [0.51, 0.71], $p < .001$. Thus, perceptions of counterparts' learning goals were positively associated with conflict outcomes.

Actor effects. Second, we sought to understand the role of actor effects in determining conflict outcomes. Namely, we investigated how each of the various goals rated by actors related to their own experiences of the conversation. Thus, in Model 2, we predicted conflict outcomes from four variables: (a) actors' perceptions of partners' learning goals, (b) actors' self-assessed learning goals, (c) actors' perceptions of partners' persuasion goals, and (d) actors' self-assessed persuasion goals. Given that all regression results for all models are available in Table 4, we provide only a summary of the most important results below.

Results were similar for both conversational enjoyment and evaluations of counterparts. When controlling for all of these covariates, we found that actors'

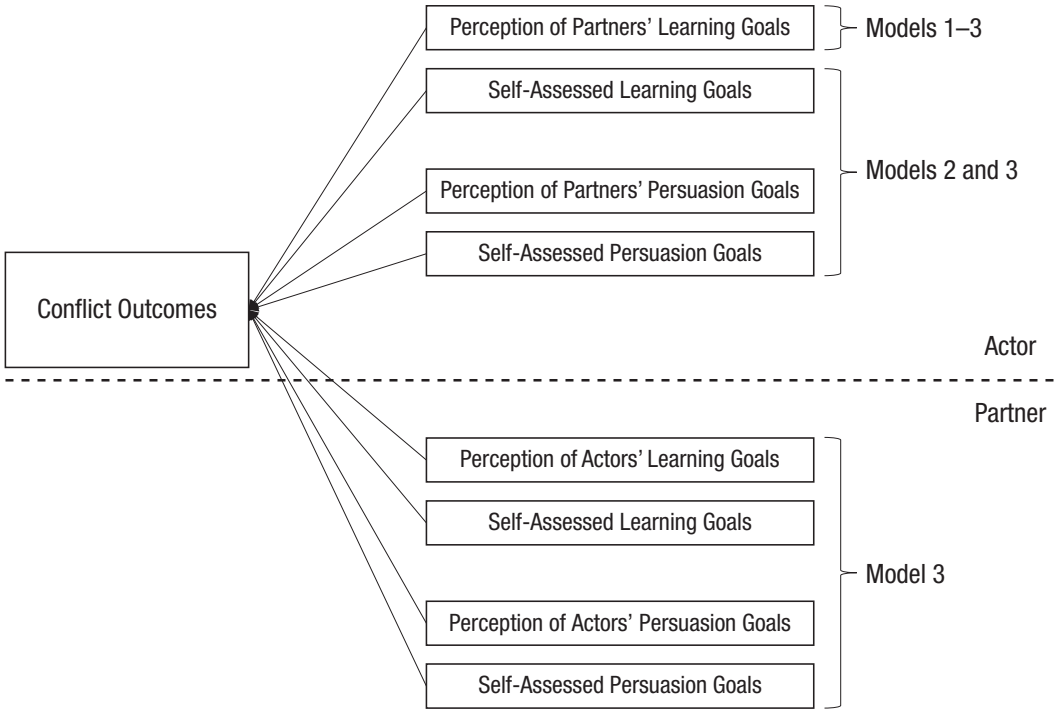


Fig. 5. Schematic showing the three-step analytic approach used to investigate actor and partner effects in determining conversational enjoyment and partner evaluations in Study 2.

perceptions of partners' learning goals were significantly positively related to conversation enjoyment, $b = 0.72$, 95% CI = [0.60, 0.84], $p < .001$. When we compared the magnitude of this fixed-effects coefficient with that of the other three predictors, we found that actors' perceptions of partners' learning goals were significantly more predictive—and more than 3 times the magnitude—of conversational enjoyment than the other three actor effects (all ps < .001). A similar pattern arose for actors' evaluations of counterparts. When we controlled for all of these covariates, actors' perceptions of partners' persuasion goals were significantly positively related to actors' evaluations of their counterparts, $b = 0.65$, 95% CI = [0.54, 0.75], $p < .001$. Last, when we again compared the magnitude of the fixed-effects coefficients, we found that actors' perceptions of partners' learning goals were significantly more predictive—and more than 2 times the magnitude—of counterparts' evaluations than the other three actor effects (all ps < .001).

Partner effects. Finally, we wanted to understand the role of partner effects in determining outcomes. In other words, we investigated how each of the various goals rated by partners related to actors' experiences of the conversation. Thus, Model 3 was a fully saturated model in which we predicted conflict outcomes from the actor variables included in Model 2 as well as the following four additional variables: (a) partners' perceptions of actors' learning goals, (b) partners' self-assessed learning goals, (c) partners' perceptions of actors' persuasion goals, and (d) partners' self-assessed persuasion goals. Given that all regression results are available in Table 4, we summarize only the key results below.

Results again looked similar for both conversational enjoyment and evaluations of counterparts. Even in this fully saturated model, considering all actor and partner effects, we found that actors' perceptions of partners' learning goals were significantly positively related to conversational enjoyment, $b = 0.65$, 95% CI = [0.53, 0.77], $p < .001$. When we compared the magnitude of all fixed-effects coefficients, we found that actors' perceptions of partners' learning goals were significantly more predictive of enjoyment than all other goals (all ps < .001). We want to highlight two additional points of interest. First, and perhaps most interesting, in this model we found that actors' perceptions of partners' persuasion goals showed a much stronger—approximately 6 times stronger—association with conversational enjoyment than partners' self-assessed learning goals (which showed no relationship), $b = 0.10$, 95% CI = [–0.06, 0.26], $p = .23$. These results emphasize the particular importance of *perceived* learning goals—regardless of whether their conversation counterparts endorsed the goal to learn about their views, actors'

Table 4. Results From Models Predicting Conversational Enjoyment and Counterparts' Evaluations From Actor and Partner Effects (Study 2)

Outcome and predictor	Model 1	Model 2	Model 3
Enjoyment			
Actors' perceptions of partners' learning goals	0.70 [0.58, 0.81]***	0.72 [0.60, 0.84]***	0.65 [0.53, 0.77]***
Actors' self-assessed learning goals		0.22 [0.06, 0.38]**	0.27 [0.11, 0.43]**
Actors' perceptions of partners' persuasion goals		–0.13 [–0.26, 0.005]†	–0.09 [–0.23, 0.05]
Actors' self-assessed persuasion goals		–0.22 [–0.36, –0.08]**	–0.15 [–0.29, –0.006]*
Partners' perceptions of actors' learning goals			0.19 [0.07, 0.31]**
Partners' self-assessed learning goals			0.10 [–0.06, 0.26]
Partners' perceptions of actors' persuasion goals			–0.07 [–0.21, 0.07]
Partners' self-assessed persuasion goals			–0.19 [–0.33, –0.05]**
Partner evaluations			
Actors' perceptions of partners' learning goals	0.61 [0.51, 0.71]***	0.65 [0.54, 0.75]***	0.59 [0.48, 0.69]***
Actors' self-assessed learning goals		0.09 [–0.05, 0.24]	0.12 [–0.03, 0.26]
Actors' perceptions of partners' persuasion goals		–0.02 [–0.14, 0.10]	0.0009 [–0.13, 0.13]
Actors' self-assessed persuasion goals		–0.27 [–0.39, –0.15]***	–0.24 [–0.37, –0.11]***
Partners' perceptions of actors' learning goals			0.19 [0.08, 0.30]***
Partners' self-assessed learning goals			0.11 [–0.03, 0.26]
Partners' perceptions of actors' persuasion goals			–0.16 [–0.29, –0.03]*
Partners' self-assessed persuasion goals			–0.16 [–0.29, –0.03]*

Note: The table shows unstandardized coefficients representing associations between actor and partner effects and conversational outcomes; 95% confidence intervals are given in brackets. Model 1 includes actors' perceptions of partners' learning goals. Model 2 includes all actor effects. Model 3 is a fully saturated model.
†$p < .10$. *$p < .05$. **$p < .01$. ***$p < .001$.

perceptions of these goals determined the outcomes. Second, it is important to note that actors' perceptions of partners' persuasion goals showed no relationship with their conversational enjoyment, $b = -0.09$, 95% CI = [–0.23, 0.05], $p = .19$—highlighting that perceived learning (and not persuasion) goals play a unique role in determining conflict outcomes.

Similarly, actors' perceptions of partners' learning goals were significantly positively related to counterparts' evaluations, $b = 0.59$, 95% CI = [0.48, 0.69], $p < .001$. As before, when we compared the magnitude of all of these fixed-effects coefficients, we found that actors' perceptions of partners' learning goals were significantly more predictive of enjoyment than all other goals (all ps < .001). Again, we highlight two points of interest. First, we again found that partners' self-assessed learning goals showed no relationship with partners' evaluations, $b = 0.11$, 95% CI = [–0.03, 0.26], $p = .13$—whereas actors' perceptions of partners' learning goals showed a significantly stronger relationship (approximately 6 times larger) with counterparts' evaluations. Again, this finding emphasizes the particular importance of perceived learning goals in conflict outcomes—above and beyond the goals that conflict counterparts self-report. Second, we again found that actors' perceptions of partners' persuasion goals showed no relationship with partners' evaluations, $b = 0.0009$, 95% CI = [–0.13, 0.13], $p = .99$—once again emphasizing that these effects do not extend to persuasion goals.

Overall, these results point to the unique importance of perceptions of a counterpart's willingness to learn for conflict outcomes—actors' perceptions of partners' learning goals were the single most important predictor of conflict outcomes (whereas partners' self-assessed learning goals and actors' perceptions of partners' persuasion goals showed no relationship).

A note on political affiliation. The three models reported above did not distinguish between actors who supported Joe Biden and those who supported Donald Trump. However, it could have been the case that the benefits of perceived learning goals differed across political affiliation. To test this hypothesis, we ran the above analyses including a term for the interaction between actors' political affiliation (whether they supported the Democratic or Republican candidate) and actors' perceptions of partners' learning goals. We found no interaction for either conversational enjoyment or partner evaluations (for details, see the Supplemental Material), suggesting that perceived learning goals were an important determinant of conflict outcomes for both Democrats and Republicans.

Linguistic markers of learning goals. Finally, on an exploratory basis, we analyzed the conversation transcripts

to investigate the linguistic cues associated with learning goals (both self-reported and perceived). To do so, we analyzed the conversation transcripts using a combination of strategies. First, we used the *politeness* R package (Version 0.8.5; Yeomans et al., 2018) to generate a count of the various linguistic features used by each participant in their conversation. This package uses pretrained natural-language-processing models to calculate a set of syntactic and social markers from natural language (e.g., gratitude, apologies, acknowledgment). Second, looking beyond the use of specific linguistic features, we also calculated each participant's level of conversational receptiveness (Yeomans et al., 2020) using a pretrained natural-language-processing algorithm.

We present two sets of key results here, but we present more in-depth analyses in the Supplemental Material. First, we were interested in understanding the linguistic cues associated with actors' perceptions of partners' learning goals. In other words, what linguistic features used by partners are associated with actors' perceptions of their learning goals? Partners perceived to place the greatest importance on learning goals (the highest 33% compared with the lowest 33%) expressed significantly less negative emotion. Further, these partners scored higher in conversational receptiveness (Yeomans et al., 2020), perhaps helping to explain one possible mechanism through which the use of this conversational style has been shown to improve conflict outcomes.

Second, we were interested in the linguistic features associated with participants' self-assessed learning goals. Indeed, participants who reported the greatest learning goals (highest 33% compared with lowest 33%) asked significantly more questions. However, these individuals did not differ in their level of conversational receptiveness (Yeomans et al., 2020), which supports previous results showing that people struggle to enact a receptive conversation style without explicit instructions on how to do so.

We did not make any specific predictions about these results, so we hesitate to make any claims about their decisiveness. However, it is interesting to note that the linguistic features associated with perceived learning goals are limited. Perhaps these goals are not effectively enacted in conversation—instead, these perceptions may be primarily based on actors' internal cognitions rather than observation of partners' behavior. Further, we note that the linguistic cues associated with self-reported and partner-perceived learning goals did not overlap. Thus, there is a disconnect between the linguistic features that individuals used to enact their learning goals in conversation and those that their partners associated with a willingness to learn. Overall, it seems that counterparts struggle to effectively signal their learning goals in conversation, which may explain the persistent underestimation of counterparts' learning goals, even after a 10-min conversation.

Discussion

After a 10-min conflictual conversation, participants underestimated counterparts' learning goals. Further, perceived learning goals were the single most important predictor of conversational enjoyment and partner evaluations.

Study 3

Method

Studies 1 and 2 provided evidence that (a) participants in conflictual conversations systematically underestimate their counterpart's learning (but not persuasion) goals and (b) perceptions of their counterpart's learning goals are a key predictor of conversational outcomes. In Study 3, we manipulated perceptions of a disagreeing partner's learning goals and asked participants to evaluate this partner. To examine the practical significance of this effect, we compared the effect of information about a partner's learning goals with the effect of belonging to the same (vs. opposing) political party.

Participants. To achieve 90% power on the basis of effect-size estimates from Studies 1a and 2, we recruited 902 participants through Prolific Academic to complete a 3-min survey. Following our preregistration, we excluded participants who failed our attention check or reported their political orientation to be neither liberal nor conservative, leaving a total of 666 participants (55% female; age: $M = 34.0$ years, $SD = 12.2$).

Protocol. We told participants that we were planning a future study in which they would be paired with another participant to have a 10-min discussion about their perspectives on current hot-button issues over an online chat platform. Participants first reported their political orientation on a scale from 1 (*extremely liberal*) to 7 (*extremely conservative*); the midpoint was 4 (*neither*; American National Election Studies, 2021). They also reported how important learning and persuasion goals would be for them in the upcoming conversation using the same six items as in previous studies. Then, participants were presented with information about a potential discussion partner who they were told had completed this survey in the past few days. At this point, each participant was randomly assigned to one of four conditions that varied in the information they received about the potential partner.

Participants in the agreement condition were told that they would be paired with a partner who reported the same political orientation as the participant (e.g., self-reported liberals were told that this potential discussion partner was also a liberal). By contrast, participants in the disagreement condition were told that their potential partner had reported the opposite political orientation. In both of these conditions, the participants were given no information about the potential partner's goals for the conversation.

In two additional disagreement conditions, we also showed participants a screenshot of the potential discussion partner's self-reported learning and persuasion goals (using the same six items that the participants had themselves completed). Thus, in the disagreement/high-learning-goals condition, participants were told that the potential discussion partner reported the opposite political orientation but also reported learning goals to be extremely important and persuasion goals to be moderately important to them for the upcoming conversation. By contrast, in the disagreement/low-learning-goals condition, the potential discussion partner was presented as having the opposite political orientation, placing minimal importance on learning goals while considering persuasion goals to be moderately important.

Our first two conditions allowed us to compare anticipated outcomes of conversations with ideologically aligned and ideologically unaligned partners. An extensive prior literature led us to predict that participants would hold negative expectations regarding a conversation with an opposite-party partner (e.g., Dorison et al., 2019). Our third condition allowed us to evaluate how much of this antipathy could be overcome by signaling to participants that the opposite-party counterpart was interested in understanding their perspective. Finally, the fourth condition enabled us to rule out the possibility that the mere mention of learning goals improves conversational expectations.

Participants also reported how moral, objective, intelligent, trustworthy, and likeable they expected their partner to be during the upcoming conversation (using the same response options as in Study 2; $\alpha = .90$). We took the average of these five items to represent a measure of partner evaluations.

Results

First, we compared partner evaluations between participants who were paired with an agreeing versus a disagreeing counterpart but who did not receive any information about that counterpart's conversational goals. As in previous work on affective polarization (Boxell et al., 2020; Iyengar et al., 2019; Minson et al., 2020), participants derogated holders of opposing views ($M = 3.95$, $SD = 0.97$) relative to holders of aligned views ($M = 4.37$, $SD = 0.96$), $t(318.43) = 3.89$, $p < .001$, Cohen's $d = 0.44$, 95% CI = [0.21, 0.66].

Critically, this effect was entirely reversed when participants learned about an ideological opponent who had reported high learning goals ($M = 4.75$, $SD = 1.05$). Indeed, the disagreeing counterpart with high learning goals was evaluated significantly more positively than an agreeing counterpart with no goal-related information, $t(329.99) = 3.46$, $p < .001$, Cohen's $d = 0.38$, 95% CI = [0.16, 0.60]. Thus, participants' aversion to engaging with a disagreeing other (compared with an agreeing other) appeared to be at least partially driven by their belief that they would be unwilling to learn about their views.

Finally, and in line with our predictions, results showed that participants made more negative evaluations of disagreeing others with low learning goals ($M = 2.81$, $SD = 0.94$) than agreeing counterparts, $t(316.10) = 14.71$, $p < .001$, Cohen's $d = 1.64$, 95% CI = [1.39, 1.90]—an effect size almost 4 times larger than the difference between agreeing and disagreeing others with no information about goals. Figure 6 presents these data. Providing information about conflict counterparts' learning goals had a significant effect on participants' evaluations of them—and could even overcome the robust effect of shared political ideology.

Discussion

Believing that an ideologically opposing conversation partner was willing to learn about one's perspective improved expectations for a conflictual conversation and had a greater effect than political ideology.

Study 4

Method

Study 3 provided initial evidence that correcting people's misestimation of opponents' learning goals can reduce affective polarization. Could this intervention yield dividends when counterparts actually engage with each other's beliefs? Study 4 examined this possibility.

Participants. To achieve 90% power on the basis of effect-size estimates from a pilot study, we recruited 506 participants through Prolific Academic to complete a 15-min survey. A total of 406 participants passed both of our preregistered attention-check questions and completed the full survey. Because of a coding error, we excluded data from an additional 75 participants who were matched with agreeing (rather than disagreeing)

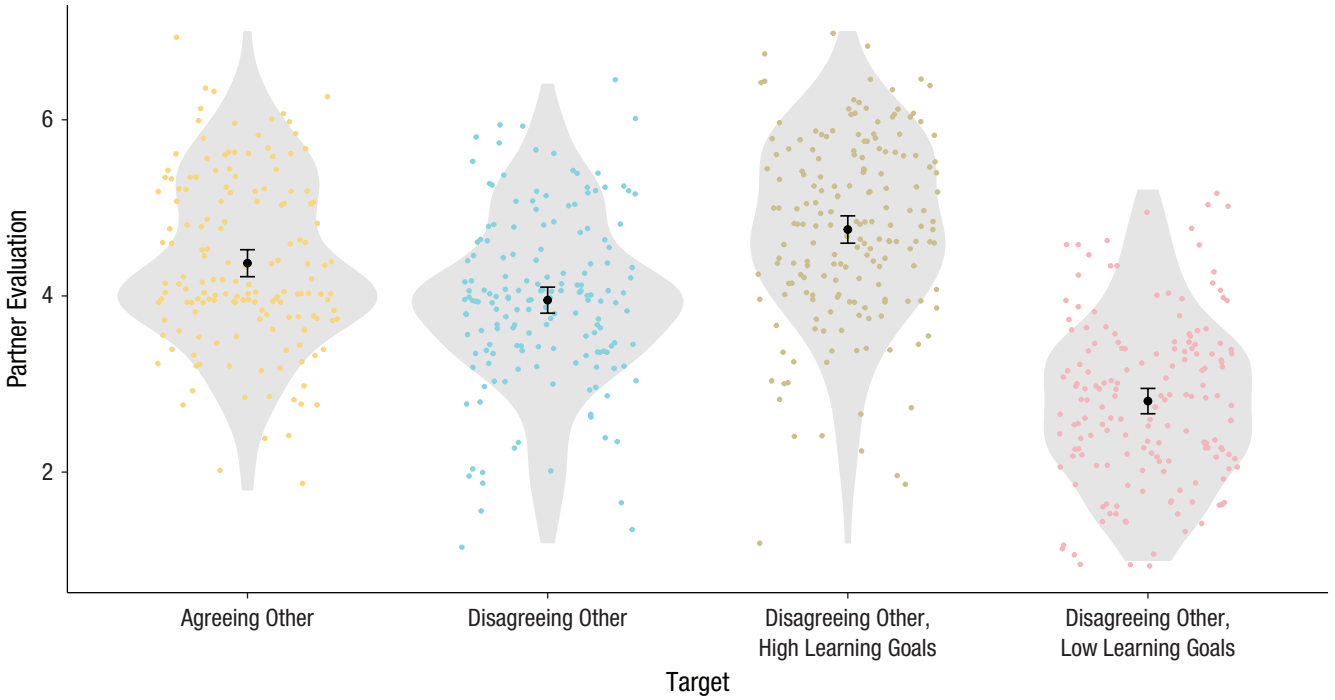


Fig. 6. Evaluation of a conversation counterpart as moral, objective, intelligent, likeable, and trustworthy (averaged) for targets and learning-goal conditions in Study 3. Shaded areas display distributions. Black dots indicate means, and error bars represent 95% confidence intervals around the means. Colored dots represent individual data.

partners (final $N = 331$; 49% female; age: $M = 35.3$ years, $SD = 12.6$).

Protocol. We informed participants that in a future study, they would have an opportunity to discuss their views on current hot-button issues using an online chat platform with another person from today's study. Their responses to the current survey would be used to match them with discussion partners. We showed participants screenshots from Chatplat, a popular research tool for conducting online interactions, to increase the believability of our cover story.

Participants then reported their attitudes on two policy issues—one concerning preferential hiring for women in science, technology, engineering, and mathematics fields and the other concerning investment by the United States in fighting international terrorist organizations. They then selected the issue that they felt most strongly about and were told that this was the topic that they would discuss in the upcoming study. We then asked participants about their goals for the upcoming conversation (using the same six items from Studies 1b to 3).

Next, we presented participants with information about two potential conversation partners who "took this survey a few days ago." Participants saw the purported partner's participant number and their view on the focal policy issue (which was always the opposite of that reported by the participant). Importantly, participants also saw a screenshot of the earlier questionnaire responses of their potential partner. This served as our manipulation. Specifically, the two partners were presented as having reported either high or low learning goals with respect to the upcoming conversation. Both partners were presented as having reported identical moderate levels of persuasion goals.

Participants viewed this information about one potential discussion partner and made several evaluations (described below). They then read a paragraph-long argument purportedly written by their future partner explaining the partner's view on the focal issue. In reality, each participant was randomly assigned to view one of five opinion statements collected in a previous study written by a different sample of online participants. To collect these seed texts, we asked a sample of participants in a previous study to write a paragraph "to support your opinion on this issue. Please incorporate all the reasons and evidence you can think of to explain your point of view." Participants then evaluated the content and tone of the statement that they believed to have been produced by the first partner they were evaluating. They then repeated the entire process for the second partner under consideration. Between participants, we counterbalanced the order of presenting the partner with the high and low learning goals. Finally, participants chose which of the

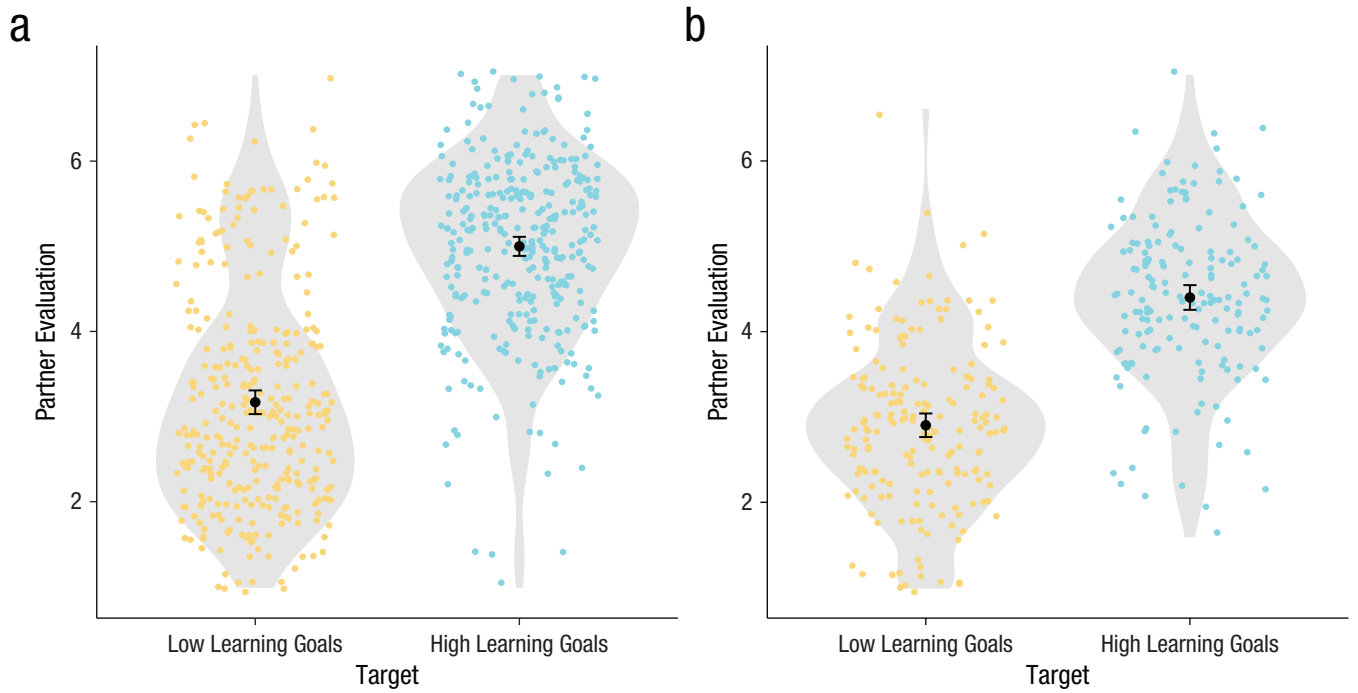


Fig. 7. Evaluation of a conversation counterpart as moral, objective, intelligent, likeable, and trustworthy (averaged) depending on the raters' perceptions of the counterparts' learning goals in (a) Study 4 and (b) Study 5. Shaded areas display distributions. Black dots indicate means, and error bars represent 95% confidence intervals around the means. Colored dots represent individual data.

two partners they were more interested in talking to during the future study.

Partner evaluations. First, participants evaluated each potential discussion partner in terms of how moral, objective, intelligent, trustworthy, and likeable their partner was likely to be during the conversation (using the same response options as in previous studies; $\alpha = .94$).

Content evaluations. Next, participants read each individual's opinion statement on the assigned issue and evaluated the content of their argument. Specifically, participants reported how persuasive, relevant, true, thoughtful, and evenhanded the statement was (from 1, *not at all*, to 7, *extremely*; $\alpha = .93$).

Tone evaluations. Finally, participants evaluated the tone of the argument, reporting how warm, confrontational, and respectful the argument was (from 1, *not at all*, to 7, *extremely*; $\alpha = .51$).

Partner choice. After having reviewed the information about the two potential discussion partners, participants were asked to select which one they would prefer to be paired with for the upcoming study.

Results

We tested four hypotheses related to our perceived-learning-goals intervention: effects on partner evaluations, evaluation of the tone of the written argument, evaluation of the content of the written argument, and willingness to interact again in the future. We found beneficial effects of perceived learning goals on all four outcomes. First, we found that participants provided more positive evaluations (calculated as the average of morality, objectivity, intelligence, trustworthiness, and likeability) when evaluating a counterpart who had reported high ($M = 5.00$, $SD = 1.04$) rather than low ($M = 3.17$, $SD = 1.29$) learning goals, $t(330) = 22.31$, $p < .001$, Cohen's $d = 1.57$, 95% CI = [1.39, 1.74] (Fig. 7a). Second, when evaluating identical counterattitudinal arguments, participants provided more positive content evaluations (the average of persuasiveness, relevance, truthfulness, thoughtfulness, and evenhandedness) when they believed that the person who wrote the argument reported high ($M = 3.38$, $SD = 1.01$) rather than low ($M = 3.13$, $SD = 0.88$) learning goals, $t(330) = 6.70$, $p < .001$, Cohen's $d = 0.26$, 95% CI = [0.11, 0.42] (Fig. 8a). Third, participants evaluated the tone of the argument more positively

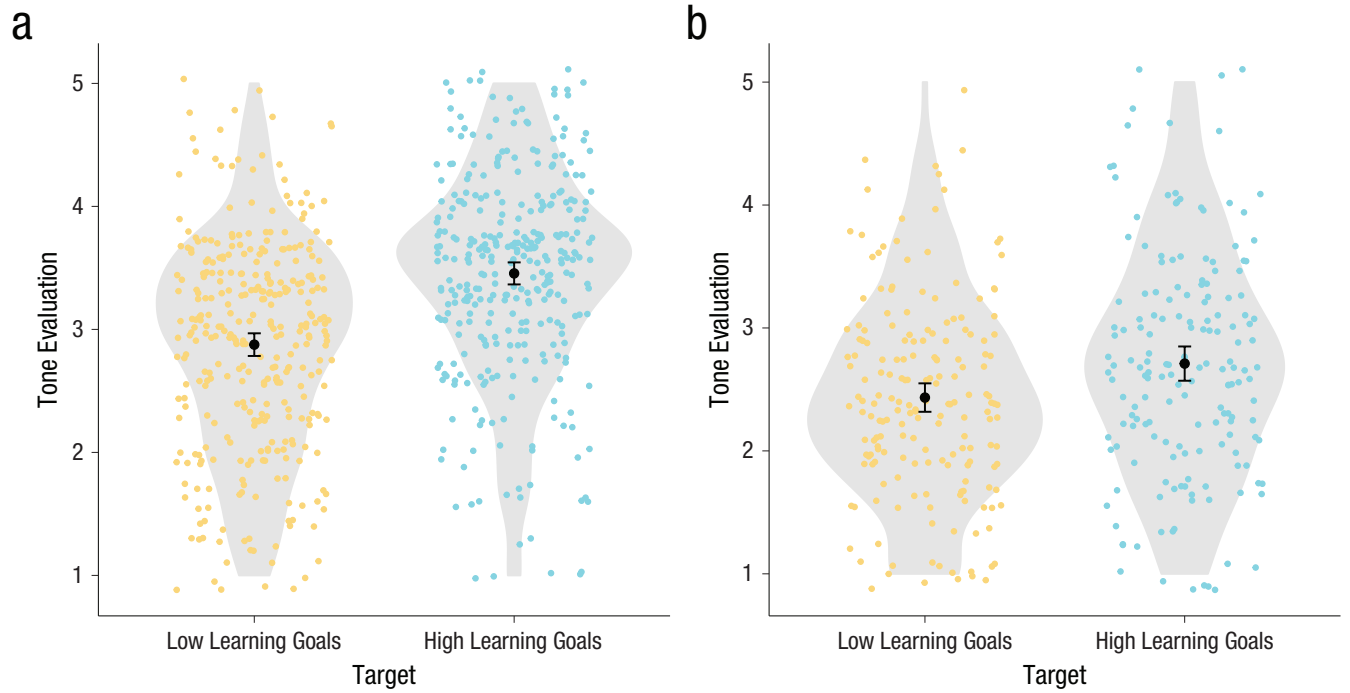


Fig. 8. Evaluation of a conversation counterpart's argument as confrontational (reverse scored), warm, and respectful (averaged) depending on the raters' perceptions of the counterparts' learning goals in (a) Study 4 and (b) Study 5. Shaded areas display distributions. Black dots indicate means, and error bars represent 95% confidence intervals around the means. Colored dots represent individual data.

(warm, confrontational [reverse scored], respectful) when they believed that the statement was written by someone with high (M = 3.46, SD = 0.83) rather than low (M = 2.88, SD = 0.85) learning goals, $t(330) = 9.95$, $p < .001$, Cohen's $d = 0.69$, 95% CI = [0.53, 0.85] (Fig. 9a). These results held for each of the individual measures and were not moderated by topic of discussion or attitude strength. Finally, participants were overwhelmingly more likely to choose to have a discussion with the disagreeing counterpart who endorsed high (78%) rather than low (22%) learning goals, $\chi^2(1, N = 330) = 102.59$, $p < .001$.

Taken together, these results provided evidence that explicitly providing individuals with information about a conflict counterpart's willingness to learn about them is a simple, scalable intervention that reduces affective polarization and increases people's willingness to engage with opposing views.

Discussion

Informing participants that their counterpart was interested in learning about their perspective again enhanced their counterparts' evaluations as well as their evaluations of the counterpart's arguments (although the arguments themselves were identical).

Study 5

Method

The earlier studies documented a robust self–other difference in people's beliefs about willingness to learn about opposing views and tested a simple intervention to correct this misunderstanding, improving evaluations of both disagreeing others and their arguments. Next, we investigated whether such effects would generalize outside of American partisan politics by testing our intervention in the context of the long-standing and bloody Israeli-Palestinian conflict.

Participants. We recruited 632 Hebrew-speaking Israeli citizens. Our preregistered intention was to recruit 600 respondents (to achieve 90% power on the basis of effect-size estimates from Study 4), but ongoing recruitment through snowball sampling led to a final sample of 632 responses. Participants were primarily recruited through online platforms (Prolific: n = 398; CloudResearch Panel: n = 140); an additional 94 volunteer participants belonged to the professional and personal networks of the authors. A total of 356 participants passed our preregistered attention check and completed the full survey (54% female; age: M = 31.4 years, SD = 11.4). This survey was conducted in Hebrew.

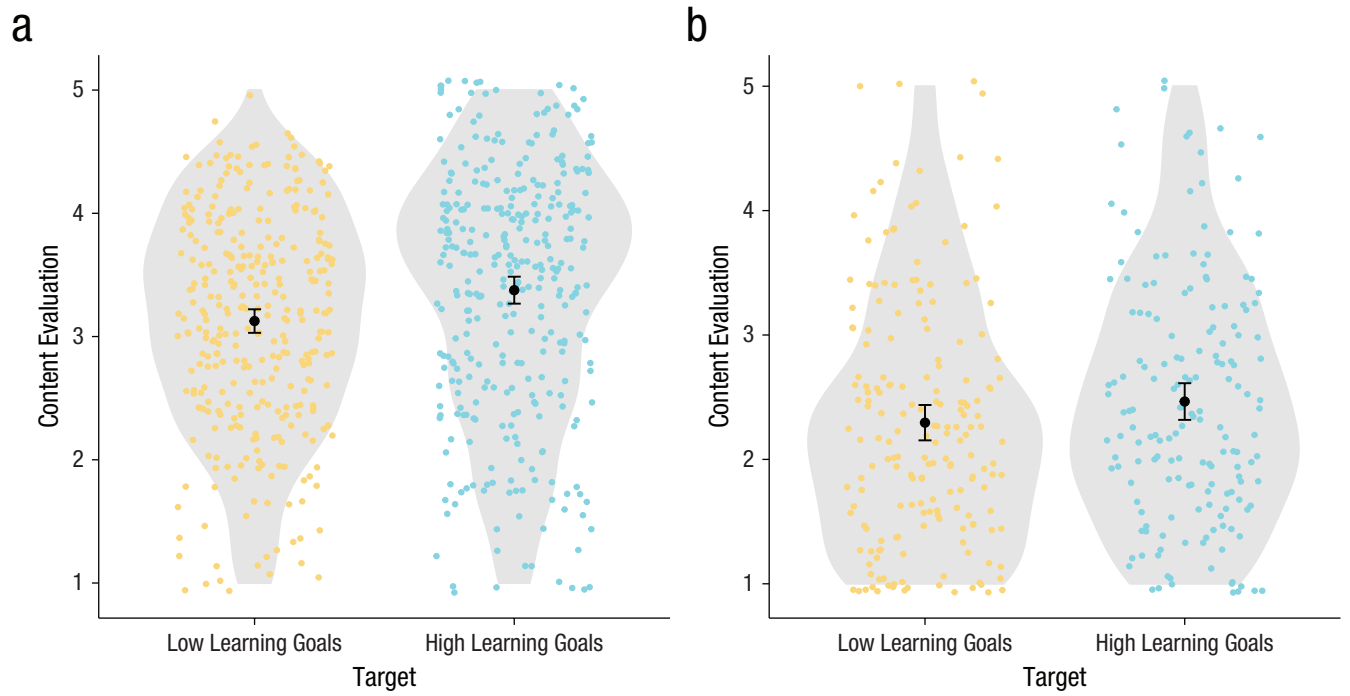


Fig. 9. Evaluation of a conversation counterpart's argument as persuasive, relevant, true, thoughtful, and evenhanded (averaged) depending on the raters' perceptions of the counterparts' learning goals in (a) Study 4 and (b) Study 5. Shaded areas display distributions. Black dots indicate means, and error bars represent 95% confidence intervals around the means. Colored dots represent individual data.

Protocol. As in Study 4, participants were informed that the survey would be used to pair them with someone for a potential future study, in which they would discuss a controversial issue over an online chat platform. Specifically, participants were asked to state their agreement with the following statement (in Hebrew): "To achieve a lasting peace agreement between Israel and the Palestinians, it will be necessary to address the Palestinian refugees' claims through internationally funded compensation and by their resettlement outside Israel's borders." Participants then reported their opinion on the issue and their goals for the upcoming conversation (using the same six items from Studies 1b to 4).

To reduce the burden on our participants and test methodological generalizability, we used a between-subjects design (rather than the within-subjects design used in Study 4) in which participants considered a single Palestinian discussion partner who reported either high or low learning goals. Thus, we presented participants with information about one potential conversation partner who "took this survey a few days ago." They viewed this purported partner's name ("Ziad El Hamid") and their view on the issue ("strongly disagree"). Importantly, participants also saw a screenshot of the earlier questionnaire responses of their potential partner indicating either high or low learning goals for the upcoming conversation. All partners were again presented as having identical moderately high persuasion goals.

As in Study 4, participants evaluated their discussion partner on several dimensions. Specifically, they rated how moral, objective, intelligent, trustworthy, and likeable their partner was likely to be during the conversation (using the same response options as in previous studies; $\alpha = .87$). We again combined these items into a single measure of partner evaluations.

Participants then read a paragraph-long argument purportedly written by this future discussion partner explaining their view on the issue. In reality, we used opinion statements that had been collected in a previous study. To collect these seed texts, we asked a sample of Palestinian residents of the West Bank to write a paragraph to "explain your reasons for your opinion" such that another person could "understand your reasoning and your beliefs." All the statements came from Palestinian respondents who strongly disagreed with the focal statement. Across both conditions, each Israeli participant in the current study was randomly assigned to view one of five such statements. Participants then evaluated the content (persuasive, relevant, true, thoughtful, and evenhanded on a scale from 1, *not at all*, to 7, *extremely*; $\alpha = .88$) and tone (warm, confrontational, and respectful on a scale from 1, *not at all*, to

7, *extremely*; α = .70) of the argument purportedly written by their potential future conversation partner.

Results

Although Study 5 was conducted in a different language and cultural context and in the midst of a long-standing and bloody conflict, we found results that were largely in line with those of Study 4. Participants evaluated a potential conflict counterpart as more moral, objective, intelligent, trustworthy, and likeable when they reported high (M = 4.40, SD = 0.95) rather than low (M = 2.90, SD = 0.96) learning goals, $t(350.66) = 14.77$, $p < .001$, Cohen's $d = 1.57$, 95% CI = [1.33, 1.81] (Fig. 7b).

Further, when evaluating identical arguments about one of the most painful issues fueling the conflict, participants provided more positive evaluations of the argument tone (warm, confrontational [reverse scored], respectful) when they believed that the author had high (M = 2.71, SD = 0.92) rather than low (M = 2.43, SD = 0.80) learning goals, $t(335.02) = 3.01$, $p = .003$, Cohen's $d = 0.32$, 95% CI = [0.11, 0.53] (Fig. 8b).

Although differences in our measure of argument content did not reach traditional levels of significance, the difference was directionally in line with our predictions (high learning goals: M = 2.47, SD = 0.97; low learning goals: M = 2.30, SD = 0.99), $t(351.38) = 1.64$, $p = .10$, Cohen's $d = 0.17$, 95% CI = [–0.04, 0.38] (Fig. 9b). Specifically, participants rated the argument as significantly more thoughtful but not significantly more persuasive, relevant, true, or evenhanded, though results for persuasiveness showed a trend toward significance ($p < .10$).

General Discussion

Across seven preregistered studies, we documented three findings. First, we identified a robust self–other difference, wherein conflict participants believed that counterparts were less willing to learn about their views than vice versa. Second, these beliefs predicted how people evaluated counterparts and their experiences with them. Third, manipulating beliefs about counterparts' learning goals improved conflict outcomes. In both American partisan politics and the Israeli-Palestinian conflict, counterparts and their arguments were evaluated more positively when participants believed that their counterpart was eager to learn about their perspective.

Contribution

Social psychology has a rich history of highlighting the role of situational forces in determining human behavior. In dyadic conflict, the social situation has one overwhelmingly salient feature: the other person. We built on the tradition of recognizing the power of the situation (Ross & Nisbett, 2011) and individual construal in shaping behavior.

Complementing prior work on the importance of individual attributes in determining conflict outcomes (e.g., receptiveness; Minson et al., 2020), our results highlight the importance of individuals' beliefs about others. This shift in focus provides a new lens for conflict research. Indeed, the results of Studies 4 and 5 suggest that clearly signaling learning goals (e.g., "I would be interested to learn what you think about . . .") could lead to more productive dialogue.

Limitations and future directions

This work has limitations that offer avenues for future research. Our studies relied primarily on online samples (MTurk and Prolific) and on participants who held strong attitudes on a specific set of topics (politics, professional sports). Additional research should test the generalizability of these results to various samples across various domains of attitude conflict—perhaps even in conversations when no conflict is present. In doing so, future work could investigate why these effects are particularly robust in political disagreements.

Second, research should investigate how learning goals can be communicated. Individuals reported higher learning goals than their partners attributed to them even after a conversation, suggesting a breakdown in communication. Interestingly, we found preliminary evidence that the linguistic cues that people associate with learning goals in others are not the same as the ones they employ themselves. Why does this mismatch occur? Could one's goals be communicated more directly? Future research could examine these questions.

Third, we relied on self-report measures to assess goals. People may have been overestimating their own willingness to learn (and accurately assessing the willingness of disagreeing others) rather than underestimating their counterpart's willingness to learn. Future research should seek to precisely identify the source of the self–other difference.

Finally, given the critical importance of perceived learning goals for conflict outcomes, we focused primarily on learning goals in conflict. However, future research should further investigate persuasion goals—especially given that we observed inconsistencies in the direction of this self–other difference before (i.e., Studies 1a–1c) and after (i.e., Study 2) a conflictual conversation. Perhaps attitude conflict is less aversive than anticipated (Dorison et al., 2019) because people are faced with fewer persuasion attempts than they expect. Additionally, future research should further examine the correlation between one's level of learning and persuasion goals.

Conclusion

We shed light on a novel misprediction—the belief that disagreeing others are unwilling to learn about our views—with important consequences for conflict outcomes. In doing so, we shifted away from a focus on individual behavior and cognitions that determine conflict outcomes and toward a greater focus on person perception. Practically, these results also suggest a simple intervention to improving disagreeing conversations that calls for broader testing and potential implementation.

Transparency

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Author Contributions

All the authors contributed to the study design. H. K. Collins, C. A. Dorison, and J. A. Minson conducted testing and data collection. H. K. Collins analyzed and interpreted the data under the supervision of C. A. Dorison and J. A. Minson. H. K. Collins and J. A. Minson drafted the manuscript, and C. A. Dorison and F. Gino provided critical revisions. All the authors approved the final manuscript for submission.

Declaration of Conflicting Interests

The author(s) declared that there were no conflicts of interest with respect to the authorship or the publication of this article.

Open Practices

Full data, code, and materials for all the studies have been made publicly available via ResearchBox and can be accessed at https://researchbox.org/372. The design and analysis plans for each study were preregistered on AsPredicted (copies of the preregistrations are available at https://researchbox.org/372). This article has received the badges for Open Data, Open Materials, and Preregistration. More information about the Open Practices badges can be found at http://www.psychologicalscience.org/publications/badges.



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Supplemental Material

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