



Contents lists available at ScienceDirect

Journal of Experimental Social Psychology

journal homepage: www.elsevier.com/locate/jesp

Attributions of emotion and reduced attitude openness prevent people from engaging others with opposing views[☆]

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ARTICLE INFO

Keywords:

Attitudes
Affective
Cognitive
Openness
Engagement
Counterattitudinal

ABSTRACT

People exhibit a general unwillingness to engage others on social issues for which they disagree (e.g., political elections, police funding, vaccine mandates, etc.), a phenomenon that contributes to the political polarization vexing societies today. Previous research has largely attributed this unwillingness to the perception that such counterattitudinal targets are extreme, certain, and/or difficult to change on these topics. However, the present research offers an additional theoretical explanation. First, we introduce a less studied perception of targets, their *affective-cognitive attitude basis* (i.e., the degree to which an attitude is seemingly based on emotions versus reasons) that is critical in determining engagement willingness. Specifically, perceivers are less willing to engage with targets who are perceived to hold an affective (vs. cognitive) attitude basis on a topic, because these targets are inferred to have low *attitudinal openness* on it (i.e., expected to be unlikely to genuinely “hear out” the perceiver). Second, we use a series of multimethod studies with varied U.S. samples to show why this person perception process is central to understanding counterattitudinal engagement. Compared to proattitudinal targets, perceivers on both sides of an issue ascribe more affective (vs. cognitive) attitude bases to rival (counterattitudinal) targets, which cues inferences of reduced attitudinal openness, thereby diminishing people’s willingness to engage with these individuals.

Political polarization stands as one of the foremost threats facing societies across the globe (cf., Finkel et al., 2020). However, one straightforward yet often ineffective way to mitigate such polarization exists: have individuals with conflicting attitudes engage with one another (Broockman & Kalla, 2016; Cortland et al., 2017; Pons, 2018; Walton & Wilson, 2018). Ongoing research currently examines the most constructive forms of these interactions, where non-judgmental exchanges about “each side’s” experiences and perspectives have been shown to meaningfully reduce polarization (Kalla & Broockman, 2021; Tjosvold, Wong, & Feng Chen, 2014; Ugarriza & Nussio, 2017; Yeomans, Minson, Collins, Chen, & Gino, 2020). But a key problem remains. Simply getting ideological dissidents to engage with one another is very challenging (Gerber, Huber, Doherty, & Dowling, 2012; Pew Research Center, 2018). So, what are some of the foremost psychological factors that help to explain why people are so reluctant toward bipartisan exchanges?

An emerging perspective in this area of research has examined how perceptions of another person’s attitude (i.e., the target) predict the

perceiver’s willingness to engage with them. In particular, this research has examined how perceptions of a target’s attitude as *extreme* and/or *certain* (common indicators of an attitude’s strength; Petty & Krosnick, 1995) reduce engagement on this topic, because these targets are inferred to be more *difficult to change* (Akhtar & Wheeler, 2016; Bechler, Tormala, & Rucker, 2020; Petrocelli, Clarkson, Tormala, & Hendrix, 2010). In the present research, we first identify another factor that affects perceivers’ willingness to engage: perceptions of the target’s *affective* versus *cognitive attitude basis* (i.e., whether a target’s attitude is seemingly based more on emotions versus reasons; Crites, Fabrigar, & Petty, 1994; Rosenberg & Hovland, 1960). We show that this perception affects engagement willingness through a novel inference-making process about the target’s *attitudinal openness* (i.e., the degree to which perceivers anticipate a target will “hear out” or “listen to” the perceiver’s views). After demonstrating this, we show how it provides important insight in understanding the lack of bipartisan engagement, offering explanatory power beyond the previous focus on counterattitudinal targets’ perceived attitude extremity, certainty, and

[☆] This paper has been recommended for acceptance by Dr Jarret Crawford.

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<https://doi.org/10.1016/j.jesp.2022.104373>

Received 17 November 2021; Received in revised form 23 May 2022; Accepted 6 June 2022

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difficulty to change.

1. Perceived affective-cognitive attitude basis on attitudinal openness

Prior research on the affective-cognitive bases of attitudes has examined how the perceiver’s own attitude basis motivates engagement likelihood, where the more affect (emotion) relative to cognition (reason) perceived to underlie one’s own attitude, the more likely that individual is to engage others on that topic (Rocklage, Rucker, & Nordgren, 2018; Teeny & Petty, 2018). In contrast, we hypothesize that when perceiving these attitude bases in others, the opposite occurs: perceiving a target to hold an affective (vs. cognitive) attitude basis reduces engagement likelihood, namely, because of a previously untested relationship between the perception of these bases and inferences of attitudinal openness.

Attitudinal openness (Xu & Petty, 2021) is a relatively recent construct that incorporates prior research on open-mindedness (Ottati, Price, Wilson, & Sumaktoyo, 2015), receptiveness (Hussein & Tormala, 2021; Minson, Chen, & Tinsley, 2020), perceived responsiveness (Reis, Clark, & Holmes, 2004), and high quality listening (Itzchakov, Kluger, & Castro, 2017; Itzchakov, Weinstein, Legate, & Amar, 2020) to describe the extent to which an individual anticipates a target will genuinely consider (or “hear out”) the perceiver’s attitude-relevant communications. Whereas the target might still process this information in a biased fashion, respond in an oppositional manner, or react judgmentally, inferred attitudinal openness reflects the extent to which a perceiver believes a target will simply receive and consider the perceiver’s attitude-specific communications. By this account, attitudinal openness is likely related to other attitude features, in particular, perceived attitude extremity and certainty (see Itzchakov et al., 2017); however, they are conceptually distinct. For example, even if a target is extreme and/or certain in a position, the target might nonetheless be open to hearing alternative views. Conversely, a target might be moderate or uncertain in a position but aspire to hold this stance, making the target unopen to alternative perspectives. As we explain shortly, perceptions of a target’s affective-cognitive attitude basis could be reliably related to inferences of openness, which should consequently impact people’s willingness to engage the target.

Surprisingly, there is little to no work examining attitudinal openness (or its related constructs) as it is perceived in others; the construct has instead been studied almost exclusively at the level of the individual (e.g., Ottati et al., 2015; Minson et al., 2020; Yeomans et al., 2020). For example, the more a person is attitudinally open, the more likely they are to interact with people from diverse cultural backgrounds (Hotchin & West, 2021). In the present research, we shift this lens on attitudinal openness to examine its influence when perceived in others. And across work in interpersonal relationships (Gable, Gonzaga, & Strachman, 2006; Livingstone, Fernández Rodríguez, & Rothers, 2020), negotiations (Curhan, Elfenbein, & Kilduff, 2009; Curhan, Elfenbein, & Xu, 2006), and counseling psychology (Myers, 2000; Pocock, 1997), interactions with those who do not genuinely consider a dialogue partner’s remarks (i.e., are low in attitudinal openness) are evaluated quite negatively (Weinstein, Itzchakov, & Legate, 2022). Thus, if someone is inferred to be low in attitudinal openness, we expect perceivers will be less willing to engage them.

As a first step inquiring when perceivers might make this inference (as targets are unlikely to assert they are low in attitudinal openness; Wilson, Ottati, & Price, 2017), we considered a fundamental perception of a target’s attitude, its perceived affective-cognitive basis. Although perceiving a target’s attitude as cognitively (vs. affectively) grounded could plausibly lead to inferences that the target would not be attitudinally open (e.g., due to the abundance of reasons, elaboration, and/or knowledge assumed to inform the attitude; Gampa, Wojcik, Motyl, Nosek, & Ditto, 2019; Karmarkar & Tormala, 2010; Ottati et al., 2015), we predicted the contrary based on several considerations. Affective

reactions are more “immediate” and experiential forms of information (Fazio & Zanna, 1981; Hookway, 2008; James, 1922). Thus, people can endorse affectively based attitudes (like their moral views) even when they’re unable to justify them (Haidt, Bjorklund, & Murphy, 2000). Moreover, people who broadly base their attitudes on affect more commonly endorse double standards that favor their views (Arceneaux & Vander Wielen, 2012). Together, these experiences might lead conversational partners to feel like their communications would not be considered, resulting in a broad inference that targets with affectively (vs. cognitively) based attitudes will be unlikely to “hear out” (i.e., have low attitudinal openness for) communications on these topics.

Notably, we expected this link between perceived affective bases and attitudinal openness to hold even after controlling for perceptions of the target’s extremity and certainty. That is, someone could be extreme or certain on a topic for either affectively or cognitively based reactions, yet it is the affect (beyond these other perceptions) that especially signals the target’s reduced openness. Thus, if targets are perceived to hold an affective (vs. cognitive) basis to their attitude, it should lower engagement likelihood, because this perception should elicit inferences that the target is not attitudinally open on the topic, which, as we describe next, provides key insight in understanding people’s broad reluctance to engage counterattitudinal targets.

2. Attitudinal openness and bipartisan engagement

As mentioned already, previous research has assumed that the inferred difficulty in changing a counterattitudinal target’s mind is one of the primary impediments to bipartisan engagement (e.g., Akhtar & Wheeler, 2016; Bechler et al., 2020). However, we argue that inferences about the target’s attitudinal openness (predicted by perceptions of the target’s affective-cognitive attitude basis) could be another predictor of engagement likelihood. As described earlier, much work points toward people’s dislike for conversations where they feel “unheard” (Weinstein et al., 2022). So, although the practical considerations of a counterattitudinal target’s certainty, extremity, and therefore difficulty to change surely influences engagement likelihood, whether perceivers feel like their communications will be considered could provide an account beyond these factors. For example, if a target seems extreme or certain in their stance, so long as it is inferred they will consider the perceiver’s remarks, the perceiver might still be willing to engage with them. In fact, even if the target seems impossibly difficult to change, should the perceiver believe the target is attitudinally open, a willingness to engage might still be present. To provide an initial test of the comparative importance perceivers place on these target-based perceptions, we conducted a nationally representative survey (in terms of age, race, and gender; $n = 387$; see the web appendix) using the data service *Prolific Academic*.

First, we conducted a qualitative pretest, asking participants to freely report on the perceptions of targets’ attitudes that affect their engagement likelihood. From this, the extremity of the target’s attitude, the certainty in the attitude (i.e., the perceived correctness), the difficulty to change the target’s attitude, and the target’s attitudinal openness (along with two other perceptions; see Table 1) emerged. We then conducted the focal survey, wherein participants rank-ordered these six

Table 1
Perceptions of Targets’ Attitudes and Their Importance for Engagement.

Perception of Target	M rank	SD	ranked first
Attitudinal openness	2.49	1.54	37.0%
Perceived knowledge	3.04	1.77	24.9%
Extremity of position	3.47	1.57	13.7%
Proneness for emotional agitation	3.63	1.76	16.4%
Self-perceived correctness	3.95	1.44	5.3%
Difficulty to change	4.41	1.44	2.7%

Note: Perceptions are ordered from most to least important (i.e., lower mean rankings indicate higher importance).

perceptions from the most important (1) to least important (6) in determining their willingness to engage with both pro- and counter-attitudinal targets. Looking across both types of targets, the perception of the target's attitudinal openness was ranked significantly higher than every other factor ($ps < 0.001$) with 37.0% of participants listing it as the most important factor in determining whether or not to engage a target on an issue.

In understanding the lack of bipartisan engagement helping to fuel political polarization, then, the present research shifts the focus from perceptions of counterattitudinal targets as extreme, certain, and/or difficult to change. Instead, counter- (vs. pro-) attitudinal targets might receive less engagement, because people largely infer these targets are unopen to alternative views – a common inference (we hypothesize) when an attitude is ascribed affective (vs. cognitive) bases. Previous research shows that people often describe those who disagree with them as “biased” (Kennedy & Pronin, 2008; Pronin, Kennedy, & Butsch, 2006), and one avenue through which perceivers impute such bias is by ascribing more emotion (vs. reason) to the target's attitude basis (i.e., as lay perceptions of affect [vs. cognition] regard it as an “inferior” basis for decision-making; Kenworthy & Miller, 2002). Thus, combining our hypotheses with prior theorizing, we propose the following. Perceivers are less willing to engage targets on topics where their attitudes are perceived to be based in affect (vs. cognition), because these targets are inferred to be less open on these issues. This person perception process is then especially relevant to understanding engagement with counter-attitudinal targets, because perceivers tend to ascribe counterattitudinal individuals more affective (vs. cognitive) bases.

3. Research overview

In the following studies, we first identify a new perception of targets that predicts engagement likelihood: the affect (emotions) relative to cognition (reasons) perceived to underlie the target's attitude. Second, by taking a novel approach to the study of attitude openness, we identify a new inference-making process that can contribute to explaining the influence of perceived affective-cognitive attitude bases on engagement likelihood. Third, we extend the finding that people generally ascribe affective (vs. cognitive) bases to counterattitudinal targets (Kenworthy & Miller, 2002) by showing how it can occur for individual targets (vs. group-level assessments) who present rationale for their opinion. Finally, we show how the effects and processes proposed in this research offer greater explanatory power for understanding bipartisan engagement relative to targets' attitude certainty, extremity, and difficulty to change.

To start, we examine the links between a target's attitude basis, inferences of openness, and engagement likelihood. Pilot Study A, conducted during the 2018 U.S. gubernatorial elections, shows that the more people perceived targets to hold affective relative to cognitive attitude bases, the less likely they reported engaging with them – an effect related to inferences of reduced openness. In Studies 1 and 2, we manipulated targets' attitude basis (affective vs. cognitive) across five different topics, replicating the aforementioned effects while also controlling for the target's perceived extremity and certainty.

Next, we use the above person perception process to help explain the lack of bipartisan exchanges. In Pilot Study B, we first show that individual counter- (vs. pro-) attitudinal targets are ascribed more affective relative to cognitive attitude bases – even after presenting ecologically valid arguments – which leads to inferences of reduced attitudinal openness. In Studies 3 and 4, we demonstrated the viability of our full theoretical model. In Study 3, using a computer confederate, and in Study 4, using a longitudinal design, we show that perceivers ascribe more affective (vs. cognitive) attitude bases to counterattitudinal targets, which leads to inferences of reduced attitudinal openness which is associated with reduced engagement likelihood. Notably, these effects predict engagement likelihood beyond the target's perceived extremity, certainty, or difficulty to change.

For the following studies, we report all materials, manipulations, and measures in the online appendix. All code for analyzing the results as well as the data on which they are based can be found at the project's OSF page [https://osf.io/c3rmj/?view_only=3cadd5be82ec4e2bab0436064015dcba]. No data were collected after reaching our target sample as all sample sizes were determined in advance. All exclusions are reported in the primary text for all studies, and sensitivity analyses are reported to determine the minimum effect size that our samples had the power to detect.

4. Pilot study A: Perceived affective-cognitive bases in a U.S. national election

For this pilot study testing the relationship between perceived affective-cognitive attitude bases, inferences of attitudinal openness, and engagement likelihood, in the two days prior to the 2018 gubernatorial elections (i.e., November 4 and 5, 2018) we paid U.S. voters \$0.50 ($n = 219$; female = 57.5%) on <http://Amazon.com>'s Mechanical Turk (MTurk) to complete a relevant survey. We used CloudResearch (Litman, Robinson, & Abberbock, 2017) to restrict participants to adults in two states with competitive races without an incumbent, Ohio and Georgia. Although these data were originally collected for a separate study (which dictated the ultimate sample size), a sensitivity test (two-tailed, $\alpha = 0.05$, power = 80%) indicated that this study could detect a correlational effect between our key variables as small as $r = 0.19$.

In the survey, participants were funneled to a series of questions tailored to their state of residence (Ohio or Georgia), where they evaluated voters who preferred the disfavored candidate. Perceptions of these targets' *affective-cognitive attitude bases* was assessed with two items, one measuring the perception that these targets' preference was based on “thoughts and reasons” and another on “feelings and emotions” (1 = Not at all based; 5 = Very much based; see, See, Petty, Fabrigar, 2008; 2013). In line with prior research, these measures were later turned into a single-item difference score (higher numbers = more affective bases). *Bipartisan engagement* was assessed with participants' reports of how much they had communicated with counterattitudinal voters about their gubernatorial preference (1 = Not at all; 7 = A great deal). Finally, *attitudinal openness* was assessed with a single item asking the likelihood that these targets would “actually consider” the merits of the participant's views (1 = Not at all likely; 7 = Extremely likely).

A series of multiple linear regressions were conducted, controlling for perceivers' political ideology, political importance, and the state in which they voted to ensure the effects were robust to these common controls; however, not including these covariates keeps the results intact. First, we found that participants, in general, rated counterattitudinal targets as more affectively relative to cognitively based (one-sample test against the midpoint, 0: $M = 1.41$, $SD = 1.49$; $t(218) = 14.01$, $p < .001$, 95% CI: [1.21, 1.60], $\eta_p^2 = 0.355$). Second, the more participants perceived counterattitudinal voters to hold affectively relative to cognitively based attitudes, the less they reported engaging with them ($B = -0.19$, $SE = 0.10$; $t(213) = -2.00$, $p = .047$; 95% CI: [-0.376, -0.003], $\eta_p^2 = 0.018$). Third, the more participants perceived counterattitudinal voters to be affectively relative to cognitively based in their attitudes, the less attitudinally open those targets were inferred to be ($B = -0.35$, $SE = 0.08$; $t(214) = -4.46$, $p < .001$; 95% CI: [-0.508, -0.194], $\eta_p^2 = 0.085$). Finally, we examined the mediational relationship between perceptions of counterattitudinal voters' attitude bases on bipartisan engagement through inferences of attitudinal openness (Hayes, 2017; PROCESS, model 4). From this pattern of analysis, a significant indirect effect emerged ($B = -0.12$, $SE = 0.04$; 95% CI: [-0.215, -0.044]), which rendered the direct effect non-significant ($p = .457$). Thus, Pilot Study A provides initial evidence that greater perceptions of a target's attitude as affectively relative to cognitively based reduces engagement likelihood, and this is plausibly because these targets are inferred to be lower in attitudinal openness.

5. Study 1: Perceived affective-cognitive bases for counterattitudinal targets

Our first experiment aimed to replicate Pilot Study A's correlational findings with a manipulation of the target's perceived attitude basis. This study examined several new topics and also controlled for any influence of perceived extremity and certainty. We presented participants with a description of a counterattitudinal target whose stance on one of three topics varied in terms of its attitude basis. We expected that targets described to hold an affective (vs. cognitive) basis would receive lower engagement intentions which would be associated with inferences of reduced attitudinal openness.

5.1. Method

5.1.1. Participants and design

We collected a total of 450 MTurk participants (payment: \$0.65), where, after removing those who failed an experiment engagement check (i.e., an unrelated but simple read-and-respond task to identify people who respond randomly; Oppenheimer, Meyvis, & Davidenko, 2009), 431 participants were retained ($M_{\text{age}} = 39.93$, $SD = 11.68$; female = 44.3%). This study consisted of a 2 (Target's Attitude Basis: affective vs. cognitive) \times 3 (Topic: voter registration vs. vaccine mandate vs. defunding the police) between-subject design. A sensitivity test (two-tailed, $\alpha = 0.05$, power = 80%) revealed that this study could detect an effect of our attitude basis manipulation as small as $d = 0.27$ (which is smaller than the effect size observed in Pilot Study A for the target's affective-cognitive attitude basis on the key inference predicting bipartisan engagement, attitudinal openness: $d = 0.60$).

5.1.2. Procedure and materials

Participants began the study by reporting their own attitudes toward each of the three topics on a six-point scale (1 = Very opposed; 6 = Very supportive). This allowed us to use internal survey logic to ensure that participants always read about a target whose stance was counterattitudinal to their own view. Participants were then randomly assigned to one of the topics, where they were presented with the "profile" of a person which described the name, age, and stance on the specific topic. It then described their attitude basis on the topic, where all content was kept equal except for whether the target's attitude was described as affective versus cognitive. For example: "You can tell that his overall [positivity/negativity] toward [topic] stems from his [emotion/reason]-based reactions on the topic." After reading the profile, participants responded to the primary measures about the target: their perceived openness, extremity, certainty, and engagement likelihood. They concluded the study by completing an attention manipulation check (i.e., recalling the target's attitude basis) and demographic questions.¹

5.2. Dependent variables

5.2.1. Bipartisan engagement

Participants reported how likely they would be to "engage with the target" and "interact with the target in some way to present your own reactions" on the topic (1 = Not at all likely; 7 = Very likely). These items were combined to form an index ($r = 0.82$).

5.2.2. Attitudinal openness

Participants indicated how likely it was that targets would be "open to receiving and attending to content" and "to genuinely listen to or

¹ At the end of the study, participants were asked to recall the target's attitude basis (1 = emotions/feelings; 2 = thoughts/reasons; 3 = both emotions and reasons). If we look only at those who answered this question correctly ($n = 351$) all results reflect those reported in the primary text. See web appendix for details.

consider views" contradictory to their attitude (1 = Not at all likely; 7 = Very likely). These two items were also combined to form an index ($r = 0.87$).

5.2.3. Control variables (Certainty and Extremity)

Participants indicated how "certain" they thought the target was in their opinion (1 = Not at all; 7 = Very certain) and how "extreme" they thought the target was in their opinion (1 = Not at all; 7 = Very extreme).

5.3. Results

For the following results, we conducted a 2 (Attitude Basis: cognitive vs. affective) \times 3 (Topic: voter registration vs. vaccine mandate vs. defunding the police) ANCOVA, controlling for perceptions of the target's perceived attitude certainty and extremity (which reduces the sample size by $n = 4$ due to non-responses).² Notably, excluding these covariates keeps the findings and their significance intact. We also note that the attitude topic (as expected) did not meaningfully interact with any of the findings, so it is not discussed further. Nonetheless, we present the estimated marginal means and standard errors from this 2 \times 3 ANCOVA to provide the most conservative test of our results.

First, participants were less willing to engage with targets described to hold an affectively ($M = 3.38$, $SE = 0.11$) compared to a cognitively based attitude ($M = 3.74$, $SE = 0.11$; $F(1,419) = 5.14$, $p = .024$; 95% CI: $[-0.664, -0.047]$, $\eta_p^2 = 0.012$). Moreover, these affectively based targets were perceived to be less attitudinally open ($M = 2.73$, $SE = 0.08$) than their cognitively based counterparts ($M = 3.50$, $SE = 0.08$; $F(1,419) = 41.33$, $p < .001$; 95% CI: $[-1.00, -0.533]$, $\eta_p^2 = 0.090$). Finally, to test the extent to which inferences about the target's attitudinal openness mediated the effect of the target's attitude basis on engagement willingness, we used model 4 of Hayes' (2017) PROCESS macro, where we additionally control for any influence of perceived certainty and extremity. This indirect effect was significant ($B = 0.14$, $SE = 0.04$; 95% CI: $[0.080, 0.218]$), and when the mediator is included in the model, the direct effect became nonsignificant ($p = .763$).

6. Study 2: Perceived affective-cognitive bases for non-counterattitudinal targets

The prior study provided experimental evidence that perceiving a target to hold an affectively (vs. cognitively) based attitude reduces engagement likelihood and is plausibly mediated by inferences of reduced attitudinal openness. Ultimately, we propose this process can be used to understand people's reticence toward engaging with counterattitudinal targets; however, we believe it is also applicable to contexts where people mostly agree on the issue. Thus, to test the robustness of these processes, we next examined whether the effects of Study 1 emerge for generally proattitudinal and/or more ambiguous targets, using two new topics (animal donations and the legalization of marijuana). We additionally included a measure of participants' own attitude bases on these topics to determine whether this moderates any of the findings.

² When examining the effects of the target's attitude basis (affect vs. cognition) on these covariates, both in Studies 1 and 2, there was no effect on the target's perceived attitude certainty. For perceived extremity, affective (vs. cognitive) targets were perceived as more extreme in Study 1, whereas there was no significant effect in Study 2. Nonetheless, perceptions of certainty and extremity were negatively correlated with engagement likelihood and inferences of attitudinal openness, so we control for them in all analyses. See the web appendix for details.

6.1. Method

6.1.1. Participants and design

We posted sign-ups at a large Midwestern University, resulting in 105 participants ($M_{\text{age}} = 19.61$, $SD = 3.51$; female = 67%) who received credit in their introductory psychology course for completing the survey. No participants were excluded. In this study, participants evaluated two targets, the order of their presentation and the target's attitude basis (affective vs. cognitive) randomly determined for both. In essence, then, it was as though participants completed two studies back-to-back. To maximize power, we convert the data to longform and collapse participants' responses across topics (effectively doubling the number of observations; Maxwell, Delaney, & Kelley, 2017). We then test a 2 between-subject (Target's Attitude Basis: affective vs. cognitive) design, accounting for the within-subject variance of the target's attitude topic (animal donations vs. marijuana legalization) in a mixed model analysis (see the Results section for details). Conducting a sensitivity test (two-tailed, $\alpha = 0.05$, power = 80%, data in longform), this study could detect a difference between our attitude basis manipulation as small as $d = 0.39$ (which is smaller than average effect size of the target's attitude basis on inferred attitudinal openness observed in the prior studies: $d = 0.66$, weighted by sample).

6.1.2. Procedure and materials

Participants came into a psychology research lab and were seated at individual computers. There, they were provided one target to evaluate at a time in random order with the attitude basis of both targets also randomly determined (i.e., a participant might evaluate two targets of the same basis or one target of each basis). To bolster the believability of the target profiles, we described them as a fellow student at their university and provided a picture and more details on the target (e.g., major, dorm) in addition to a brief statement about the target's attitude on the respective topic. For the animal donations topic, the target held a positive attitude (the prevailing stance held by this sample); for marijuana legalization, the overall valence of the target's attitude was unstated (i.e., left ambiguous). In line with Study 1, we manipulated targets' attitude bases, while keeping all else equal. For example, in reading about the targets, participants learned "he uses [emotionally/rationally] charged language in explaining his position." We also employed manipulations adapted from prior research (Crites et al., 1994) by describing the target's relevant emotions (e.g., "love," "happiness") or cognitions (e.g., "benefits," "value"). In addition to the primary outcome measures (listed below), participants completed a manipulation check for each target's perceived attitude basis (1 = Thoughts and reasons; 7 = Feelings and emotions). At the end of the study, participants also reported their own perceived attitude basis on two separate measures (one for cognition, one for affect) for each topic (See et al., 2008), which we converted into difference scores for each topic ($-6 = \text{Reason-based}$; $6 = \text{Emotion-based}$) to explore whether participants' own perceived attitude bases moderated their judgments and intentions.

6.2. Dependent variables

6.2.1. Willingness to engage

Due to the target's stance not being strictly counterattitudinal, we worded this question such that if participants "disagreed with an aspect" of the target's opinion, how willing they would be to discuss the focal issue with them (1 = Not at all willing; 7 = Very willing).

6.2.2. Attitudinal openness

To confirm the generalizability of our earlier measures, we used two new but conceptually similar items about openness: participants' expectations that the target would be willing "to hear opinions opposite to their own" and "genuinely consider" arguments from those opposed to their position (1 = Not at all likely; 7 = Very likely). As before, we

averaged these items to form an index (collapsed across topic, $r = 0.85$).

6.2.3. Control variables (Certainty and Extremity)

Although the perception of the target's certainty was assessed with the same item from Study 1, perception of extremity was measured as the absolute difference between the participant's perception of the target's attitude toward the topic (1 = Very negative; 7 = Very positive) and the scale midpoint.

6.3. Results

In order to account for the random variation within participants for the specific combination of attitude topic and attitude basis for each target the participant evaluated, we used SPSS's General Estimating Equations (Hardin & Hilbe, 2002). This extension of a generalized linear model accounts for the non-independence of observations (set to an exchangeable working correlation matrix) and uses a chi-square probability parameter estimate and Cramér's V effect sizes (small: $\phi_c < 0.2$; moderate: $0.2 < \phi_c < 0.6$; large: $\phi_c > 0.6$). This type of analysis allows us to collapse participants' responses to the two targets in testing a 2 between-subject (Target's Attitude Basis: affective vs. cognitive) design, while allowing us to model the within-subject variance (i.e., the participant's specific topic and basis combinations) and control for perceptions of the target's attitude certainty and extremity. Notably, in this analysis we can also test for whether any effects of the focal manipulation (i.e., the target's attitude basis) varied between topics; however, it never meaningfully did, so we do not discuss it further. Nonetheless, below we report the estimated marginal means and standard errors from the full mixed model design.

First, we note that our manipulations were successful: the affective (vs. cognitive) target was perceived to hold a more affectively based attitude ($M_{\text{affect}} = 6.37$, $SE = 0.13$ vs. $M_{\text{cognition}} = 2.97$, $SE = 0.22$; Wald's $\chi^2(1) = 166.92$, $p < .001$; 95% CI: [2.88, 3.91], $\phi_c = 1.26$). More focally, we replicated Study 1 for targets who were not strictly counterattitudinal, where participants reported significantly lower engagement willingness for affectively ($M = 4.00$, $SE = 0.17$) compared to cognitively described targets ($M = 4.64$, $SE = 0.16$; Wald's $\chi^2(1) = 10.14$, $p = .001$; 95% CI: [-1.03, -0.244], $\phi_c = 0.311$). We also found that targets with an affective attitude ($M = 2.74$, $SE = 0.13$) were inferred to be less attitudinally open than targets with a cognitive attitude ($M = 4.10$, $SE = 0.14$; Wald's $\chi^2(1) = 61.99$, $p < .001$; 95% CI: [-1.70, -1.02], $\phi_c = 0.768$). To test whether any of the aforementioned effects were moderated by the participants' own perceived attitude bases, we next ran a 2 (attitude basis) \times 2 (topic) \times continuous (self-perceived attitude basis) mixed model design. However, only one significant effect emerged from these analyses. The more participants perceived their own attitudes as affectively relative to cognitively based, the more they perceived the target's attitude as affectively based (Wald's $\chi^2(1) = 3.99$, $p = .046$; 95% CI: [0.055, 1.40], $\phi_c = 0.195$; see the web appendix for complete details on these analyses).

Finally, we tested the extent to which inferences about the target's attitudinal openness mediated the effect of the target's attitude basis on engagement willingness (Hayes & Rockwood, 2020; MLmed Macro), continuing to control for perceived certainty and extremity. As iterated, not controlling for them keeps all effects intact. From this analysis, the proposed indirect effect was significant ($B = 0.34$, $SE = 0.07$; 95% CI: [0.208, 0.489]), and this pattern of analysis rendered the direct effect nonsignificant ($p = .922$).

7. Pilot study B: Pro- vs. counterattitudinal targets on attitude bases and openness

From the prior studies, we have shown how perceiving a target's attitude as affectively (vs. cognitively) based reduced engagement likelihood by leading perceivers to infer the target is not attitudinally open. In the remaining studies, we show how this person perception

process can speak to the lack of bipartisan engagement, namely, by perceivers' tendency to ascribe greater affective (relative to cognitive) attitude bases to individual counterattitudinal targets. To do this, we first conducted a pilot study that focused exclusively on (1) how perceivers ascribe affective-cognitive attitude bases to pro- versus counterattitudinal targets, and (2) how these attitude basis ascriptions influence inferences about those targets' attitudinal openness. In total, we employed three waves of data collection to conduct an ecologically valid, yoked-design study.

For the three waves, all data were collected from MTurk. Participants were paid approximately \$0.15 per minute for the respective survey, which varied the total payment depending on the study's length. First, we recruited participants ($n = 100$) to find a social issue with the most equal distribution of support and opposition, where "defunding the police" revealed an even split of opposition and support. Second, we recruited another group of participants ($n = 82$) to generate 3–4 sentences that reflected their stance on this topic, thus providing ecologically valid expressions of how people communicate their opinions.³ Lastly, we recruited a third group of participants ($n = 144$; $M_{\text{age}} = 37.06$, $SD = 11.33$; female = 45.8%) to evaluate either a pro- or counterattitudinal statement for a 2-cell (Target's Attitudinal Position: pro vs. counter) between-subjects design. That is, in this final stage of data collection, participants were randomly presented with one of the previous participants' statements either in support or opposition to "defunding the police." After reading it, participants evaluated this target's perceived affective-cognitive attitude basis, attitudinal openness, and perceived extremity and certainty on the topic, using the same items as Study 2. We used participants' own attitude on the topic to classify whether participants randomly received a pro- or counterattitudinal statement in testing a 2 (Target's Attitudinal Position) between-subjects ANCOVA, controlling for perceived attitude certainty and extremity. Conducting a sensitivity test (two-tailed, $\alpha = 0.05$, power = 80%), this study can detect a difference between our attitudinal position manipulation as small as $d = 0.45$.

In line with past research (Kenworthy & Miller, 2002) – but now extended to specific targets who present rationales for their opinions – targets expressing a counterattitudinal position were ascribed greater affective bases ($M = 0.49$, $SE = 0.33$) than those expressing a proattitudinal position ($M = -2.11$, $SE = 0.34$; $F(1,140) = 29.56$, $p < .001$; 95% CI: [1.65, 3.55], $\eta_p^2 = 0.174$). Moreover, these counterattitudinal targets were inferred to be less attitudinally open ($M_{\text{counter}} = 3.43$, $SE = 0.17$ vs. $M_{\text{pro}} = 4.46$, $SE = 0.18$; $F(1,140) = 17.06$, $p < .001$; 95% CI: [-1.52, -0.537], $\eta_p^2 = 0.109$). The position expressed in the statement (pro or anti defunding the police) did not further moderate these results. Finally, a test of mediation (Hayes, 2017; PROCESS, model 4), whereby the target's attitudinal position influenced inferences of attitudinal openness through the attitude bases ascribed to them was significant ($B = 0.38$, $SE = 0.08$; 95% CI: [0.232, 0.536]). This pattern of analysis rendered the direct effect on attitudinal openness nonsignificant ($p = .228$).

8. Study 3: Bipartisan engagement with a computer confederate

In the final two studies, we bring together the results of the prior studies to help explain people's reticence for bipartisan engagement. Specifically, we show how the tendency to ascribe more affective relative to cognitive bases to counter (vs. pro) attitudinal targets – and its consequences for inferences of reduced attitudinal openness – can be linked to lower engagement likelihood. For Study 3, we used a new topic

³ In checking for differences between the statements generated by supporters and opposers of this topic, we used text analysis (Evaluative Lexicon; Rocklage et al., 2018), where no differences in word count ($M_{\text{support}} = 53.89$ vs. $M_{\text{oppose}} = 52.60$, $p = .824$) nor use of emotional language emerged ($M_{\text{support}} = 4.52$ vs. $M_{\text{oppose}} = 4.42$, $p = .772$).

(i.e., kneeling during the national anthem) and led participants to believe they were speaking to another participant. In addition to the measures we have so far assessed, novel to this study we also measure the target's perceived difficulty to change. Prior research would suggest this is a predominant predictor of engagement likelihood, so we will compare its influence against the processes documented in the present work.

8.1. Method

8.1.1. Participants and design

Drawing from a large Midwestern University, we posted sign-ups on a week-by-week basis until the semester concluded, for a final sample of 149 participants ($M_{\text{age}} = 19.88$; female = 49%) who all received course credit in their introductory psychology course for participating in the study. However, due to the timing of the study (i.e., at the outset of the 2019 COVID pandemic, when students had recently been vacated from campus), we had concerns about participant attentiveness. Thus, we used an exploratory free response box to exclude participants who demonstrated explicit disengagement with the task (e.g., typed nonsense in the discussion box; $n = 6$) as well as those who incorrectly identified the valence of the target's attitude ($n = 22$). This produced a final sample of 121 participants ($M_{\text{age}} = 19.63$, $SD = 2.09$; female = 46%) for a 2-cell (Target's Attitudinal Position: pro vs. counter) between-subjects design. Conducting a sensitivity test (two-tailed, $\alpha = 0.05$, power = 80%), this study can detect a difference between our attitude basis manipulation as small as $d = 0.51$ (which is smaller than the effect size of the target's attitudinal position on attitudinal openness as observed in Pilot Study B, $d = 0.60$).

8.1.2. Procedure and materials

To ensure credibility of the study design, the procedure involved multiple elements that have been advised for promoting believability in studies employing deception (Olson & Raz, 2021). First, all participants received reminder emails leading up to the study session that reinforced they would be speaking with a real participant. Then, upon starting the experiment, participants learned that various University departments were involved in this research in order to increase the believability that other participants would indeed be online at the time of the experiment. In the study itself, multiple "loading screens" were displayed before participants were connected to an "online network," at which point, participants reported their attitudes toward a number of social topics. Ostensibly based on these responses, the computer program then tried to pair participants with another participant, where, after one seemingly failed attempt (i.e., to bolster believability) a match was found and a link was provided.

Clicking this link, participants were brought to a new survey designed with different fonts, background, and an online chatting company's logo. After a few more "loading screens," participants learned that the topic of discussion between them and their partner would be "kneeling in protest during the national anthem." To create a time delay for participants' partner to ostensibly write them a message on this topic, participants answered approximately 25 unrelated personality and self-report questions. Upon completion, participants were notified that their partner had submitted a message, where participants then received either a pro- or counterattitudinal communication on the topic. This message was written in the first-person and its content was constant across conditions with only its position framing varied (e.g., "This kind of protest [dishonors/still honors] the men and women who have fought for our country"). Both statements were derived from the pros and cons listed on a popular website (<http://ProCon.org>). After reading the statement, participants responded to the dependent measures: the target's ascribed attitude basis, their perceived certainty and extremity, their inferred openness, and their own engagement likelihood (along with some exploratory items). They then learned the online connection with their partner had been "lost," which ostensibly required

the study to end prematurely. Participants concluded the experiment by answering some demographic questions as well as their own perceived attitude basis on the focal topic similar to Study 2 (now a single item). In the debriefing, participants were asked not to inform other potential participants about the study's deception.

8.2. Dependent variables

8.2.1. Engagement willingness

Participants reported how willing they would be to engage their partner on this topic (1 = Not at all willing; 7 = Very willing), which could presumably influence their extent of discussion (as there were other discussion partners available at the time). Additionally, we asked participants how likely they would be to have a similar discussion with someone who shared their current target's opinion (1 = Not at all likely; 7 = Very likely). These two items showed similar effects, so we averaged them to form an index ($r = 0.50$).

8.2.2. Attitudinal openness

We captured openness with three items similar to Study 2, asking about the target's inferred "openness," willingness to "genuinely listen to," and likelihood to actually "consider" counterattitudinal opinions on this topic ($\alpha = 0.783$).

8.2.3. Ascribed affective-cognitive attitude basis

We assessed targets' attitude basis with a single-item bipolar scale (1 = Greatly based on thoughts and reasons; 4 = Equally based on both; 7 = Greatly based on feelings and emotions), which conceptually mirrors computing a difference score between unipolar measures while simplifying the implementation.

8.2.4. Control variables (Certainty, Extremity, and Difficulty to Change)

We assessed certainty with the same item from our prior studies and extremity with the same item from Study 2. Inferred difficulty to change was assessed as how difficult participants thought it would be to change their partner's opinion on this topic (1 = Not at all difficult, 7 = Very difficult).

8.3. Results

We ran a 2-group (Target's Attitude Position: pro vs. counter) between-subjects ANCOVA on our primary measures, controlling for perceptions of the target's attitude certainty, extremity, and difficulty to change.⁴ Notably, not including these covariates keeps the findings and their significance intact.

First, in line with prior research, people were less willing to engage with counterattitudinal ($M = 5.06$, $SE = 0.15$) versus proattitudinal targets ($M = 5.58$, $SE = 0.15$; $F(1,116) = 5.54$, $p = .020$; 95% CI: $[-0.946, -0.081]$, $\eta_p^2 = 0.046$). Next, replicating our findings from Pilot Study B, perceivers ascribed significantly greater affective relative to cognitive attitude bases to counter- ($M = 3.91$, $SE = 0.19$) versus proattitudinal targets ($M = 3.01$, $SE = 0.19$; $F(1,116) = 11.13$, $p = .001$; 95% CI: $[0.365, 1.43]$, $\eta_p^2 = 0.088$). They also inferred that counterattitudinal targets were less attitudinally open ($M_{\text{counter}} = 4.12$, $SE = 0.14$ vs. $M_{\text{pro}} = 4.59$, $SE = 0.14$; $F(1,116) = 5.54$, $p = .020$; 95% CI:

⁴ Examining the effects of the target's attitudinal position on these covariates, there were no significant effects on perceived extremity. However, in line with prior work (Blatz & Mercier, 2018), pro- (vs. counter-) attitudinal targets were seen as significantly more certain in their attitude across studies. When examining perceptions of difficulty to change, Study 3 showed no significant effect of the target's attitudinal position, whereas Study 4 showed that counter- (vs. pro-) attitudinal targets were perceived as more difficult to change. Nonetheless, because all three measures were correlated with our primary outcome measures across studies, we control for them in all analyses.

$[-0.871, -0.075]$, $\eta_p^2 = 0.046$). In line with Study 2, we also tested whether the participant's own perceived attitude basis on the topic moderated any of the findings; however, it did not, so it is not discussed further (see the web appendix for details).

Finally, we tested our full theoretical model, whereby the effect of the target's attitudinal position on engagement willingness was sequentially mediated through ascribed affective-cognitive attitude bases and inferred attitudinal openness. Using model 6 of Hayes' (2017) PROCESS macro (controlling for perceived certainty, extremity, and difficulty to change; though, not controlling for these keeps the effect intact) produces a significant indirect effect ($B = 0.02$, $SE = 0.02$; 95% CI: $[0.001, 0.058]$; see Fig. 1). In this full model, the direct effect of the target's attitudinal position on engagement willingness became nonsignificant ($p = .111$). Finally, we note that when jointly comparing the effect of attitudinal openness and difficulty to change on engagement willingness, openness was a significant predictor ($B = 0.28$, $SE = 0.10$; $t(118) = 2.94$, $p = .004$, $\eta_p^2 = 0.068$), whereas difficulty was not ($B = 0.06$, $SE = 0.09$; $t(118) = 0.61$, $p = .540$, $\eta_p^2 = 0.003$).

9. Study 4: Bipartisan engagement surrounding the U.S. holiday Thanksgiving

Our final study aimed to provide greater ecological validity for our proposed theoretical model by examining a timepoint in U.S. society known for bipartisan engagement, Thanksgiving, using a topic for which consequential opinions existed, the outcome of the 2020 U.S. Presidential election. Thus, the day before Thanksgiving 2020, we asked participants to bring to mind and evaluate someone they would be interacting with over the holiday (either a pro- or counterattitudinal individual). In the days following, we assessed the extent to which participants reported engaging with these targets, and later, we tested the degree to which our proposed model could account for this behavior.

9.1. Method

9.1.1. Participants and design

Due to the greater variance in this type of study design as well as potential attrition for our Time 2 measures, we posted sign-ups to collect 300 MTurk workers (each paid \$0.65) for a 2 (Target's Attitudinal Position: pro vs. counter) between-subjects design. In line with Study 3, we excluded participants who provided poor data quality according to a free response box ($n = 12$) as well as those who incorrectly identified an individual for their randomly assigned pro- or counterattitudinal condition ($n = 9$). We were left with a final Time 1 sample of 279 participants ($M_{\text{age}} = 36.99$, $SD = 10.36$; female = 35.5%). On the two days following Thanksgiving, we recontacted all participants who passed the initial exclusion criteria, receiving a total of 239 Time 2 responses (each paid \$0.65). Of these participants, 40 reported not interacting with the individual they listed at Time 1, precluding the possibility for them to engage on the focal topic. This left a final Time 2 sample of 199 participants ($M_{\text{age}} = 37.75$, $SD = 10.71$; female = 37.7%). Conducting a sensitivity test (two-tailed, $\alpha = 0.05$, power = 80%), this study can detect a difference between our attitude position (pro vs. counter) manipulation at Time 1 as small as $d = 0.34$ and at Time 2 as small as $d = 0.40$ (which were both smaller than the average effect size, weighted by sample, of the target's attitudinal position on inferred openness as observed in the prior two studies: $d = 0.53$).

9.1.2. Procedure and materials

On the day before Thanksgiving 2020, we recruited U.S. citizens and randomly assigned them to name someone they would interact with on the next day who either held a pro- or counterattitudinal position on the 2020 U.S. Presidential election (i.e., "someone who views the outcome of the 2020 U.S. Presidential election [similarly to vs. differently than] you"). For participants who indicated they would *not* be interacting with someone from their randomly assigned condition, they were asked to

† = $p < .10$ | * = $p < .05$ | ** = $p < .01$ | *** = $p < .001$

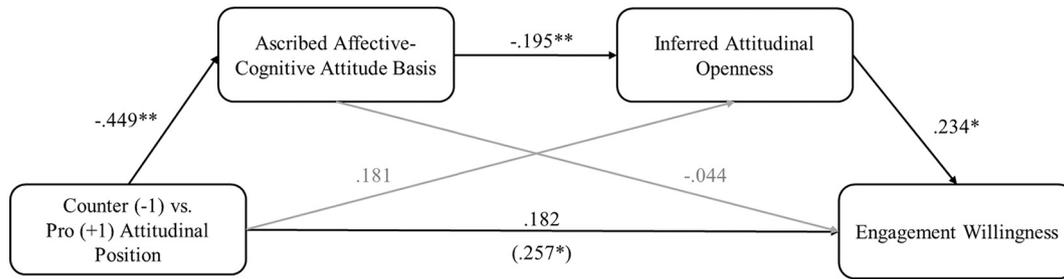


Fig. 1. This graph depicts the mediational model for Study 3, whereby the ascribed affective-cognitive attitude bases (i.e., higher scores indicate greater perceptions of affect relative to cognition) and inferred attitudinal openness serve as sequential mediators for the effect of target’s attitudinal position on perceivers’ willingness to engage the target.

generate the name of someone with the alternate attitudinal position. In the primary text, we report the statistics *only* for those able to name someone from their initial, randomly assigned condition (Time 1: $n = 227$; Time 2: $n = 154$) to provide the most conservative test of our hypotheses.⁵ After generating the name of this individual, participants responded to the primary Time 1 dependent measures in the order described below.

On the two days following Thanksgiving (Nov. 27 and 28), we recontacted all non-excluded participants and left the survey open for completion until November 30. In this Time 2 survey, participants were provided the name of the individual they listed at Time 1 and were asked to indicate the extent to which they engaged that person about the outcome of the 2020 U.S. Presidential election over the past day.

9.1.3. *Dependent variables*

9.1.3.1. *Ascribed affective-cognitive attitude basis.* At Time 1, we assessed attitude basis for the target on two unipolar items, which were later converted into a bipolar difference score (see Pilot Study A).

9.1.3.2. *Attitudinal openness.* At Time 1, we assessed openness with the same three items from Study 3 plus an additional one measuring how “curious” they thought their target was to hear counterattitudinal communications ($\alpha = 0.929$). Notably, not including this novel item in the subsequent analyses does not alter any of the findings or their significance.

9.1.3.3. *Control variables (Certainty, Extremity, and Difficulty to Change).* At Time 1, we assessed certainty, extremity, and the inferred difficulty to change the target’s attitude on the topic with the same items from Study 3.

9.1.3.4. *Engagement.* At Time 2, we assessed the degree to which participants reported engaging with their targets on the focal topic using two items, one measuring the extent to which they “engaged in a discussion about both of your views” and another on how much they “talked with and potentially influenced [target’s] opinion” on the 2020 U.S. Presidential election (1 = Not at all; 5 = A moderate amount; 9 = A great deal). These two items were later averaged together ($r = 0.94$).

9.2. *Results*

First, in line with the robust finding on social homophily (cf., Kosinets & Watts, 2009), we ended up with imbalanced conditions, where

⁵ When we examine the results from the full sample (i.e., participants both assigned and reassigned to specific targets), the descriptive and inferential results look nearly identical to those reported (see the web appendix).

more people at Time 1 were able to report a proattitudinal ($n = 131$) versus counterattitudinal ($n = 96$) person with whom they would be interacting. To address this, we conducted an initial series of robustness checks, including both Welch’s and Brown-Forsythe ANOVAs (which do not assume variance homogeneity and adjust their degrees of freedom accordingly). Moreover, we also randomly selected an equal number of cases from the larger condition (proattitudinal) so that it matched the number of cases in the smaller condition (counterattitudinal, $n = 96$) and reran the same series of ANOVAs. Across these tests, the significance of the findings did not change. Thus, below we report the estimated marginal means and standard errors from 2-cell ANCOVAs (target’s attitudinal position) using the full sample, controlling for perceptions of the target’s certainty, extremity, and difficulty to change. As before, not controlling for the aforementioned covariates keeps the effects intact.

First, in line with prior research, participants reported generally less engagement with counterattitudinal ($M = 3.53, SE = 0.33$) versus proattitudinal targets ($M = 4.31, SE = 0.26; F(1,149) = 3.27, p = .072; 95\% CI: [-1.61, 0.071], \eta_p^2 = 0.021$). More importantly, and replicating our earlier studies, perceivers ascribed significantly greater affective relative to cognitive attitude bases to counterattitudinal targets ($M_{counter} = 1.14, SE = 0.33$ vs. $M_{pro} = -1.80, SE = 0.28; F(1,222) = 43.46, p < .001; 95\% CI: [2.06, 3.81], \eta_p^2 = 0.164$). Perceivers also inferred that counterattitudinal targets ($M = 4.74, SE = 0.22$) were less attitudinally open than proattitudinal ones ($M = 5.35, SE = 0.18; F(1,222) = 4.35, p = .038; 95\% CI: [-0.119, -0.034], \eta_p^2 = 0.019$). Finally, we tested for sequential mediation in line with Study 3 (Hayes, 2017; PROCESS, model 6), where the effect of the target’s attitudinal position on engagement occurred through the indirect path of ascribed attitude bases and inferred attitudinal openness, controlling for perceptions of the target’s attitude certainty, extremity, and difficulty to change. This indirect effect was significant ($B = 0.08, SE = 0.05; 95\% CI: [0.010, 0.192]$; see Fig. 2). In this pattern of analyses, the direct effect of the target’s attitudinal position on self-reported engagement was nonsignificant ($p = .195$). Furthermore, when jointly comparing the effect of attitudinal openness and difficulty to change on engagement, openness was a significant predictor ($B = 0.31, SE = 0.09; t(151) = 3.34, p = .001; \eta_p^2 = 0.069$) whereas difficulty was not ($B = -0.08, SE = 0.13; t(151) = -0.61, p = .542, \eta_p^2 = 0.002$).

10. *General discussion*

One of the foremost paths to combatting political polarization is to have people of opposing views engage with counterattitudinal others (e.g., Broockman & Kalla, 2016). Unfortunately, people tend to be unwilling to do this, which previous research has largely attributed to perceptions about the target’s attitudinal extremity, certainty, and the perceived difficulty required to change the target’s mind. However, in the current research, effects on these measures were not only inconsistent (see Footnotes 2 and 4 as well as the web appendix), but they also

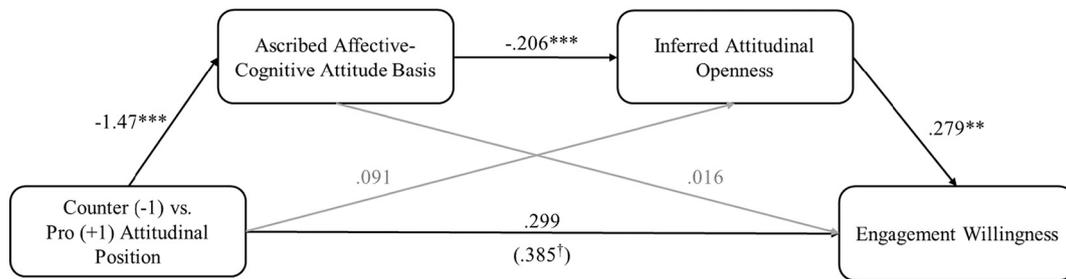
† = $p < .10$ | * = $p < .05$ | ** = $p < .01$ | *** = $p < .001$ 

Fig. 2. This graph depicts the mediational model from Study 4, whereby the ascribed affective-cognitive attitude bases (i.e., higher scores indicate greater perceptions of affect relative to cognition) and inferred attitudinal openness serve as sequential mediators for the effect of the target's attitudinal position on perceivers' reported engagement with their specific target.

had reduced explanatory power relative to the focal perceptions outlined here. That is, regardless of how certain, extreme, or difficult to change a counterattitudinal target was perceived to be, it was the affect (relative to cognition) ascribed to their attitude that predicted inferences of reduced attitudinal openness, which in turn determined bipartisan engagement.

These findings emerged across multiple topics, varied study designs, and in light of targets presenting actual rationale for their opinions. Moreover, post-hoc analyses reveal that these effects were neither moderated by which side of the issue the participants took, nor the participant's ideological stance (i.e., both liberals and conservatives demonstrated these effects), nor the participants' own perceived attitude basis. Thus, in taking a novel approach to the study of affective-cognitive bases and attitudinal openness, this research identified robust predictors of engagement likelihood. Altogether, then, this research suggests a new yet straightforward solution for motivating bipartisan engagement: have individuals intentionally speculate on the cognitive rather than affective bases underlying their target's attitude, because this should lead to inferences they are more attitudinally open, motivating engagement.

In addition to the above contributions, this work also provides theoretical insight for the literatures on naïve realism (Ross & Ward, 1995) and the "bias" we ascribe to counterattitudinal targets (Kennedy & Pronin, 2008; Lord, Ross, & Lepper, 1979; Pronin et al., 2006). Although perceivers can ascribe various forms of bias to those with whom they disagree (cf., Ross & Ward, 1995), research has often lumped these different types under a single umbrella-term (e.g., Kennedy and Pronin, 2008). In the present research, we demonstrate how one specific form of ascribed bias (i.e., affective attitude bases) can lead to a specific inference about the target (i.e., reduced openness). Of course, there is still the question on how other forms of bias ascribed to counterattitudinal targets (e.g., self-interested motives) could have distinct effects on perceivers' inferences and behaviors toward them, but we leave this for future research.

10.1. Limitations

Although we strove to be methodical in testing the proposed theorization, there are nonetheless limitations to the current findings worth addressing. First, our samples came from either online or university-based populations. We tried to maximize external validity by testing our theorized model on real-world topics as well as participants who spanned a wide range of ages, geographies, and ideologies (and our introduction survey on the importance of attitudinal openness used a sample demographically representative of the U.S.). However, we acknowledge that our primary sample sources are known to possess certain predispositions (Goodman, Cryder, & Cheema, 2013), so it may limit the generalizability of the findings.

Second, in testing our proposed theorizing, our experimental designs

and consequent analytic strategies relied upon statistical mediation (Hayes, 2017). One important robustness test in this pattern of analysis is to check for reverse or alternative indirect paths (Fiedler, Harris, & Schott, 2018). Thus, we can return to Studies 1, 2, 3, and 4 to conduct such analyses (see the web appendix for details). Specifically, in Studies 1 and 2, we can reverse the order of the mediator (attitudinal openness) and the outcome (willingness to engage). Doing so does produce a significant indirect path in both studies (i.e., the target's attitude basis on engagement willingness then predicts attitudinal openness). However, the direct effects in this analysis remain highly significant ($ps < 0.001$), whereas in our proposed conceptual model, this direct effect was reduced to non-significance. Moreover, in Studies 3 and 4, where we test the full theoretical model, reversing the order of the distal mediator (attitude openness) and the outcome (engagement willingness) yields a non-significant indirect effect. Similarly, if we reverse the order of the mediators in this model (inferred attitudinal openness now precedes ascribed attitude bases), it also produces a non-significant indirect effect. Thus, from the totality of these robustness checks, it appears as though the proposed theorizing provides the most plausible account for the findings.

Although we believe this takeaway is further bolstered by the fact that we controlled for potentially related and influential perceptions (i.e., perceived attitude certainty, extremity, and the difficulty to change the target's mind), we acknowledge there are likely other perceptions of targets involved in our findings. Specifically, interpersonal factors, like how empathetic the target is anticipated to be, could be relevant for perceivers' engagement willingness (see Itzhakov, DeMarree, Kluger, & Turjeman-Levi, 2018). Indeed, in our survey described in the introduction, other interpersonal perceptions, such as how agitated the target might become, were also influential in determining one's perceived willingness to engage. Thus, there is more work to be done in understanding how related perceptions of a target might be involved in people's decisions to engage a target on a specific topic.

10.2. Future directions

We believe there are many important theoretical questions that can further expand this research. First, as discussed at the outset, ongoing work has found that non-judgmental exchanges, where both parties listen to the other side's perspective, result in the greatest mutual attitude change (e.g., Kalla & Broockman, 2021). From the present research, we are unable to determine how the person perception processes we outlined would affect the actual exchange (i.e., to ultimately know if it would be productive). Instead, we were foremost interested in understanding what motivates people to engage with counterattitudinal targets in the first place. But how might perceptions of the target's attitude basis or attitudinal openness affect the actual exchange? Does inferring low attitudinal openness lead perceivers to be more likely to simply share their stance on the topic versus attempt more explicit

persuasion (Itzhakov et al., 2018)? At this time, our work cannot answer this important question, in part, because the degree to which these target-based perceptions reflect reality remains unclear.

Much social psychological research has identified how people are often wrong about their perceptions of others (e.g., Cooney, Boothby, & Lee, 2021; Eyal, Steffel, & Epley, 2018; Hart, VanEpps, & Schweitzer, 2021). For example, although people might infer that those with more affectively relative to cognitively based attitudes are less attitudinally open, this might not be true. Previous research suggests that affective individuals are more prone to partiality in evaluating counterattitudinal information (Arceneaux & Vander Wielen, 2013); however, they might still receive and consider (i.e., be open to) such information. But even if we assume affectively based individuals are less open on the topic, we see at the same time that people on both sides of an issue are ascribed more affective relative to cognitive bases. However, it is impossible for both sides on an issue to have more affective bases than the other, so at a minimum, this perception (or at least the relative degree to which it's ascribed) would indeed be inaccurate.

Questions also remain on the extent to which there might be specific individuals or specific attitude topics where people will be more likely to apply these perceptions. For example, Crawford and colleagues (2017) found that social issues drive political conflict more than economic ones. Might perceivers suspect that targets hold more affectively based attitudes for social (vs. economic) policies, which leads to inferences they will be less attitudinally open on these topics? Such possibilities raise questions in line with our earlier ones on how our findings would influence any exchanges that do take place. That is, the present work focused on how one side of the conversation (the perceiver) can influence engagement willingness; however, in actual exchanges, the outcomes of these communications are highly dependent on the specific listener-speaker dyad, rather than a single individual's characteristics (Kluger et al., 2021). This raises questions for how the perceiver's expectations could influence or lead to a recursive, self-fulfilling prophecy, where perceivers who expect low openness ultimately elicit it by their own behaviors (see Word, Zanna, & Cooper, 1974).

In closing, we acknowledge that many important questions remain on this topic. So, we hope the current work can provide a foundational understanding for some of the key social cognitive forces influencing people's willingness to engage those with whom they disagree, helping us to facilitate cross-attitudinal interactions before the division between viewpoints is too great for even civil discourse to bridge.

Author note

All funding for this research came directly from research funds distributed by the authors' respective institutions.

Appendix A. Supplementary materials

Supplementary materials for this article can be found online at <https://doi.org/10.1016/j.jesp.2022.104373>.

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