

The Surprising Effectiveness of Hostile Mediators

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Abstract

Contrary to the tendency of mediators to defuse negative emotions between adversaries by treating them kindly, we demonstrate the surprising effectiveness of hostile mediators in resolving conflict. Hostile mediators generate greater willingness to reach agreements between adversaries (Experiment 1). Consequently, negotiators interacting with hostile mediators are better able to reach agreements in incentive-compatible negotiations than those interacting with nice mediators (Experiments 2). By serving as common enemies, hostile mediators cause adversaries in conflict to feel more connected and become more willing to reach agreement (Experiments 3 and 4). Finally, we manipulate the target of mediators' hostility to document the moderating role of common enemies: mediators who directed their hostility toward both negotiators (bilateral hostility) – becoming a common enemy – increased willingness to reach agreement; those who directed hostility at just one negotiator (unilateral hostility) did not serve as common enemies, eliminating the hostile mediator effect (Experiment 5). We discuss theoretical and practical implications, and suggest future directions.

Keywords: mediation; conflict; negotiation; emotions; hostility

1. Introduction

Former Finnish president Martti Ahtisaari, a world-renowned conflict mediator, has helped resolve tough international crises from NATO to Namibia using an unusual approach: by adding hostility to an already tough conflict. When asked to describe Ahtisaari's unconventional style of mediation, a former negotiator recounted, "It's easy to see when he's mad... He listens to you attentively with a sour expression, then he just bursts and throws his pencil on the table" (Ford 2006). Ahtisaari's strategy demonstrates that stern treatment of both parties can have an unusual effect: adversaries who moments before were in conflict may find themselves more united against a hostile mediator – and might even end up finding room for agreement. In this paper, we explore whether hostile mediators can increase adversaries' willingness and propensity to reach agreement.

Individuals embroiled in thorny disputes, ranging from family feuds to corporate conflicts, often turn to mediation in hopes of resolution (De Dreu 2010, 2011, Rubin et al. 1994). Disputants in these conflicts have interdependent outcomes, perceive "a divergence of interests," and "[believe] that [their] current aspirations cannot be achieved simultaneously" (Pruitt and Rubin 1986, p. 4). To resolve these conflicts, adversaries can seek the assistance of a third-party mediator who helps both sides reach voluntary, non-binding agreements (Bercovitch et al. 1991, De Dreu 2010, Hiltrop and Rubin 1982, Pruitt

1981, Wall 1981). Manuals on effective mediation suggest that a mediator should “*listen* attentively to all participants and express *empathy* with their viewpoints, taking care not to appear to favor the ideas of some people over others” (Susskind et al. 1999). Indeed, gaining trust by establishing this rapport of understanding between the mediator and negotiators is a commonly espoused “best practice” in facilitating conflict resolution (Beardsley et al. 2006, Susskind et al. 1999).

Because mediators naturally tend to “control their expression of hostility” and “develop a rapport with [the negotiators],” little is known about how mediators that fail to meet these standards influence negotiators’ ability to resolve conflict (Lim and Carnevale 1990). Existing research on the role of hostility in conflict has demonstrated the deleterious effects of adversaries expressing hostility toward each other on negotiators’ perceptions of one another (Tng and Au 2014, Van Kleef and Côté 2007, Van Kleef et al. 2004) and their ability to resolve conflict (Pillutla and Murnighan 1996, Sinaceur and Tiedens 2006, Van Kleef and De Dreu 2010). Whereas prior research has demonstrated that directed hostility between adversaries intensifies conflict, we explore how emotional displays of hostility from a third party – a mediator facilitating the dispute – can *reduce* conflict.

By studying mediator behaviors counter to what is typically recommended, we seek to better understand the mechanisms that increase negotiators’ motivation and ability to resolve conflict. Building on past research demonstrating that shared experiences can increase cohesion (Sherif 1958, Sherif et al. 1961), we propose that when faced with a hostile mediator, negotiators perceive themselves to share a common enemy, leading them to be more willing and likely to reach agreement than if that mediator had been kind. Of course, studying the positive impact of hostility does not suggest that mediators should always adopt this extreme behavior in daily practice; instead, we seek to study non-normative behaviors to offer novel insight into the critical and complex role of directed emotions in resolving conflict.

2.1. Hostility

Our primary prediction – that a hostile mediator can increase the likelihood of conflict resolution relative to a nice one – seems counterintuitive in light of recent research in both psychology and management focusing on the detrimental social consequences of negative displays of emotion. We note that hostility goes beyond merely taking a tough stance on issues or pressing negotiators to reach agreement (Carnevale and Conlon 1988, Lim and Carnevale 1990). We define hostility as “aggressive behaviors directed toward injuring other people” (Spielberger et al. 1983, p. 162), often involving displays of resentment, anger, rudeness, spitefulness, and negative evaluations of the target victim (Buss 1961). In our research, we treat displays of meanness, or general unkindness, as manifestations of hostility targeted at individuals and locate hostility on the low spectrum of “warmth,” an important dimension upon which people evaluate others (Cuddy et al. 2008, Fiske et al. 2002, Laceyfield 2008,

Lelieveld et al. 2012). Conversely, we classify nice behaviors, which are generally intended to help other individuals and considered best practice for conflict mediators, as high on this “warmth” dimension.

Thus far, research on displays of hostility has revealed negative consequences for individuals on the receiving end of the hostility; for example, being the target of rude behaviors or social exclusion in organizations has been shown to reduce individuals’ task performance (Porath and Erez 2007) and their likelihood of helping others (Porath and Erez 2007, Twenge et al. 2007). Consistent with this research is corollary work showing the benefits of positive emotions: increased positive affect, well-being, and prosocial acts within organizations (Dunn et al. 2008, George 1991, Grant and Gino 2010, Weinstein and Ryan 2010).

2.1.1 The Role of Hostility in Conflict Resolution

In negotiation and dispute resolution contexts, the study of hostility has focused on how negotiators’ expressions of anger influence both negotiators’ perceptions of each other and final outcomes. In general, this research demonstrates that feelings of anger and directed hostility at the bargaining table have negative consequences: negotiators harbor more unfavorable impressions of their angry counterparts and are less willing to engage in future interactions with them (Van Kleef and De Dreu 2010, Van Kleef et al. 2004). Expressions of anger also elicit negative emotions from the other side: negotiators become angry in response to angry low-power bargainers and fearful in response to angry high-power bargainers (Lelieveld et al. 2012).

Negative expressions also have detrimental consequences for outcomes of negotiation, as they incite more extreme demands from the opposing side (Kopelman et al. 2006, Tng and Au 2014), reduce counterparts’ willingness to concede on important issues (Tng and Au 2014), and achieve fewer joint gains (Allred et al. 1997). Furthermore, people who experience anger after receiving unfair offers are more likely to reject low offers in ultimatum games, suggesting that when people experience hostility, they reciprocate with spiteful acts (Allred et al. 1997, Pillutla and Murnighan 1996). In contrast, negotiators who display positive emotions are more likely to close deals, engage in future business relationships with their counterparts, and achieve higher joint gains (Carnevale and Lawler 1986, Kopelman et al. 2006).

Although there is a wealth of research on the impact of emotional displays from negotiators on negotiation and dispute outcomes, there is less work on how displays of emotions from individuals other than negotiation counterparts – such as mediators – influence outcomes. To date, most research on effective mediators has focused on tactical and structural decisions that mediators make, including the impact of time pressure, the relative effectiveness of mediation as compared to arbitration, and the implementation of private one-on-one meetings with negotiators (Carnevale and Conlon 1988, Hiltrop

and Rubin 1982, Lewicki et al. 1992, McGillicuddy et al. 1987, Ross and Wieland 1996, Shapiro and Brett 1993).

We build on existing research that criminal interrogators and bill collectors routinely pair a “good cop” with a “bad cop” who uses a strategy of being tough to increase compliance from criminals and debtors in the presence of a “good cop” (Rafaeli and Sutton 1991). In our research, we test how the presence of one “bad cop” expressing hostility changes the dynamic of conflict between negotiators. Additionally, we build on evidence that mediators occasionally forgo civility to some extent and strategically “press” negotiators to reach an agreement in high-conflict situations (Carnevale and Conlon 1988, Lim and Carnevale 1990) to study how mediators’ emotional expression of hostility beyond merely pressing parties for agreement impacts negotiators’ willingness and ability to reach agreement.

2.1.2. Mediator Hostility Creates Common Enemies

We suggest that mediation of disagreements is an interesting case where the documented benefits of positive emotions and costs of displaying hostility may reverse. We propose that this reversal is due to the unique interpersonal dynamics that characterize mediated conflicts, which involve (at least) three parties: two adversaries and a mediator. In unmediated conflicts, which involve only two adversaries, high-conflict relationships between the two negotiators form as a result of unresolved differences, increasing their social distance. The presence of a third-party mediator, however, complicates these dynamics. In mediated conflicts – in contrast to unmediated conflicts – the mediator not only serves as a strategic guide that influences how disputants think about the conflict and perceive each other, but the presence of the mediator, and particularly the emotions that the mediator displays, can have a critical impact on the extent to which negotiators perceive each other as enemies.

In particular, we propose that the hostility of the mediator may lead negotiators to consider the mediator as a shared adversary. In the process, negotiators may find each other more agreeable – a *common enemy effect*. Sherif et al.’s (1961) classic study with children at camp demonstrates how a negative event – a bus breaking down – caused two competing factions of campers to work together, erasing the starkly in-group/out-group distinctions they had previously adopted. Similarly, a negative experience with a hostile mediator may unite the negotiators as they bond over their dislike of the mediator, increasing their willingness to resolve conflict (Bosson et al. 2006).

We define a common enemy as a third party individual or group that is commonly disliked (Sherif, 1958). Common enemies emerge in a variety of different ways. For example, parties in a competitive market may perceive a common enemy in a third party that threatens to compete for existing resources (Goolsbee and Syverson 2005, Kuester et al. 1999, Simon 2005). Realignment of goals between two parties or changes in the availability of resources may lead these groups to perceive a common enemy in a third group that does not share mutual interests (Eisenhardt and Schoonhoven 1996, Koka and

Prescott 2008). In our research, we study the emergence of a common enemy not due to threats in resources but from threats in the form of emotional displays of hostility.

We draw this conceptual account from social distance theory (Brewer 1979, Tajfel 1982), which suggests that the perception of social distance between individuals depends on the extent to which individuals share common experiences. Research on groups demonstrates that shared emotional experiences increase intragroup cohesion. For example, shared feelings of nostalgia strengthen the support of ingroup members (Wildschut et al. 2014), and sharing the same painful experience generates greater cooperation amongst group members (Bastian et al. 2014). In our research, we test our full theoretical model that the shared experience of being the joint target of directed hostility is enough to increase perceptions of having a common enemy, reducing the social distance between opposing parties and increasing motivations and abilities to cooperate. Note that our prediction is specific to sharing the experience of being a target of hostility: should a mediator direct hostility toward only one counterpart and not the other, a perception of a common enemy will not emerge and agreement will not become more likely.

3. Overview of the Research

We test our predictions regarding the effect of hostile mediators on negotiators' attitudes and behaviors toward their counterparts in six experiments. Whereas a pilot study suggests that people predict that hostile mediators are *less* effective at resolving conflict than nice and neutral mediators, evidence from the remaining experiments suggest that these predictions are not supported. In Experiment 1, negotiators are more willing to reach an agreement with their counterpart in the presence of a hostile mediator than in the presence of a nice or neutral mediator. In an incentivized negotiation, Experiment 2 shows that mediator hostility increases not only reported willingness but also ability to reach agreement. Assessing the mechanism driving the hostile mediator effect, Experiments 3 and 4 test the full theoretical model that hostile mediators serve as common enemies, causing adversaries once in disagreement to become more willing and able to find room for agreement. Finally, Experiment 5 tests the common enemy hypothesis via moderation, by directly manipulating whether the mediators' hostility is targeted toward both negotiators, thereby creating a common enemy, or toward just one negotiator – thus preventing negotiators from perceiving a common enemy.

3.1. Pilot Study: Predictions about Mediators

The goal of this pilot study is to assess people's intuitions about the effects of different mediation styles on negotiations.

3.1.1. Method

Participants. One hundred participants ($M_{age} = 32.30$, $SD = 11.06$; 42% female) completed an online survey that asked them to predict dispute outcomes after interacting with mediators with varying

levels of hostility. Participants were recruited through Amazon's Mechanical Turk and paid \$0.25 for the five-minute study.¹

Design and procedure. In a between-subjects design, participants were informed, "you will be asked to predict the results of an experiment." Participants were provided with information about two parties in dispute over unexpected costs that were accrued as a result of misunderstandings and miscommunication. Participants read about a dispute adapted from the "Viking Investment" dispute exercise (Greenhalgh 1993) in which a carpenter and condominium developer were in dispute over unexpected costs incurred (see Appendix A in the electronic companion).

Afterwards, participants read a transcript of either a hostile, nice, or neutral mediator as featured in Experiment 1 (see Appendix B) and were asked to imagine that negotiators had just interacted with one of these mediators. Participants then predicted "the percentage of negotiating dyads that would reach an agreement on their own after interacting with a [nice, neutral, or mean] mediator."

3.1.2. Results and Discussion

An ANOVA using participants' judgments about the percentage of future negotiators that would reach an agreement as the dependent variable revealed a significant main effect of the mediator's style, $F(2, 97) = 44.60, p < .001, \eta_p^2 = .48$. Pairwise comparisons using LSD corrections show that participants expected hostile mediators to be less successful in helping negotiators reach agreements ($M = 28\%, SD = 21.70$) as compared to nice mediators ($M = 70\%, SD = 14.53, p < .001$) and neutral mediators ($M = 65\%, SD = 23.53, p < .001$). The difference between the effect of nice and neutral mediators on the propensity to reach an agreement was not significant ($p = .33$).

These results indicate that people intuitively believe that hostile mediators are less likely to help negotiators reach agreements as compared to nice and neutral mediators. Because participants made predictions for mediators labeled as mean, neutral, or nice, participants' responses may have been influenced by demand characteristics of the study. However, the direction of these findings is congruent with recommendations that mediation practitioners remain neutral and understanding (Susskind et al. 1999). The following experiments provide evidence demonstrating the opposite outcomes that individuals predicted: negotiators involved in a mediated conflict are actually more willing to reach agreement in the presence of a hostile, rather than nice, mediator.

3.2. Experiment 1: Hostile, Neutral, and Nice Mediators

Whereas the pilot study explored peoples' intuitions about the effect of hostility on dispute outcomes, Experiment 1 examines the actual effect of three different mediation styles – hostile, neutral, and nice – on negotiators' willingness to reach an agreement with their counterpart. In this experiment, participants assumed the role of a negotiator and listened to a prerecorded hypothetical mediation. We predicted that those who imagined interacting with a hostile mediator would be more willing to reach an

agreement with their counterpart as compared to those who imagined interacting with a nice or neutral mediator.

3.2.1. Method

Participants. Ninety-six individuals recruited through Mechanical Turk participated in an online study in exchange for \$0.25, a standard market rate at the time the experiment was conducted. We aimed to recruit approximately 100 participants based on an intuitive power estimate.²

Design and procedure. Participants were randomly assigned to one of the following conditions: hostile, nice, or neutral mediator. Participants read about a dispute adapted from the “Viking Investment” dispute exercise (Greenhalgh 1993) and played the role of a carpentry contractor in disagreement with a developer over who should cover unexpected costs incurred. Participants then listened to a three-minute recording of a hypothetical mediation.

As our manipulation of the mediator’s hostility, we varied the mediator’s tone of speech toward the negotiators (see Appendix B). Furthermore, to ensure that our findings were not specific to the mediator’s gender, participants were randomly assigned either a male or female mediator.

Although mediators generally asked the same substantive questions to both negotiators across all three conditions (e.g., “I’m going to request that each of you succinctly explain your situation”), hostile mediators used a more belligerent tone and were at times more spiteful. For example, when the mediator needed to schedule an additional meeting, the hostile mediator said, “Given that my schedule is busier than yours, I’ll choose the time – noon tomorrow”; the nice mediator asked, “I know we are all very busy, but could you both do noon tomorrow?”; and the neutral mediator simply asked, “How about noon tomorrow?” During this meeting, participants across all conditions listened to the same recording of a male counterpart responding to the mediator. After listening to the meeting, participants completed a survey about their perceptions of the mediator and counterpart.

Dependent measures. All items in this experiment were completed using a seven-point scale unless indicated otherwise (1 = *not at all*, 4 = *somewhat*, 7 = *extremely*). After the mediation, participants indicated “the extent to which the mediator was mean” as a measure of hostility. Participants then imagined they had an opportunity to meet with their counterpart before another scheduled meeting with their mediator. We measured their willingness to reach agreement using the following four items: 1) “How likely do you think you would be to reach an agreement before the scheduled meeting with the mediator?” 2) “How willing do you think you would be to concede on issues that are important to you?” 3) “How likely are you to meet with your counterpart before the meeting?” and 4) “How flexible do you think you would be in your demands?” ($\alpha_{\text{self}} = .79$). We also asked participants to rate how they believe their counterpart would answer these questions ($\alpha_{\text{counterpart}} = .77$).

3.2.2. Results and Discussion

Mediator hostility. An ANOVA on meanness ratings revealed the predicted main effect for mediator style, $F(2, 93) = 17.15, p < .001, \eta_p^2 = .27$. Post-hoc tests using LSD corrections indicated that participants in the hostile-mediator condition rated the mediator as more mean ($M = 4.21, SD = 1.88$) than did participants in both the neutral-mediator ($M = 2.23, SD = 1.52, p < .001$) and the nice-mediator conditions ($M = 2.06, SD = 1.50, p < .001$); the difference between these last two conditions was not significant ($p = .68$). These results indicate that our manipulation of mediator hostility was effective.³

Willingness to reach an agreement. We conducted a between-subjects ANOVA using participants' willingness to reach an agreement with their counterpart as the dependent variable. This analysis revealed a significant effect for mediator's level of hostility, $F(2, 93) = 4.02, p = .02, \eta_p^2 = .08$. Post-hoc tests using LSD corrections indicated that participants in the hostile-mediator condition reported being more willing to reach an agreement with their counterpart ($M = 4.62, SD = 1.01$) as compared to participants in both the neutral-mediator condition ($M = 3.93, SD = 1.30, p = .02$) and the nice-mediator condition ($M = 3.97, SD = .98, p = .02$). The difference in this rating between these last two conditions was not significant ($p = .90$). Participants also believed that their counterpart was more willing to reach an agreement in the hostile mediator condition ($M = 4.42, SD = .94$) than the nice-mediator ($M = 3.67, SD = .95, p = .002$) and neutral-mediator conditions ($M = 3.47, SD = 1.04, p < .001$). Ratings of perceptions of the counterpart's willingness to reach agreement did not differ across conditions ($p = .40$).

The results of Experiment 1 show that, compared to participants who interacted with a nice or neutral mediator, those interacting with a hostile mediator reported greater willingness to reach an agreement. These findings provide initial support for the link between a mediator's hostility and negotiators' willingness to reach agreement in mediated conflict.

3.3. Experiment 2: Negotiation Outcomes

Whereas Experiment 1 focused on individuals' willingness to reach an agreement with their counterpart, Experiment 2 assesses actual agreements between negotiators. In a laboratory setting, negotiators communicated with their counterpart and mediator to reach agreements in incentive-compatible negotiations. This experiment investigates the role of mediator hostility in negotiation contexts where perceptions of misaligned incentives can impede cooperation between two parties. We hypothesized that negotiating in the presence of a hostile mediator would increase rates of agreements reached as compared to negotiating in the presence of a nice mediator.

While we focus on the propensity for negotiators to reach a resolution, we also consider the quality of the agreements reached based on the extent to which these agreements were integrative and equitable (De Dreu et al. 2006). Prior research suggests that hostile environments generate fewer negotiations overall and lead negotiators to make early concessions and purely distributive agreements, suggesting these deals were more focused on value claiming rather than value creation (Sinaceur and

Tiedens 2006, Van Kleef and Côté 2007). This research would predict that the hostile environment created by hostile mediators would influence negotiators to arrive at less integrative and equitable agreements. Alternatively, results from Experiment 1 would suggest that hostile mediators increase motivation to reach agreement, potentially helping negotiators reach more integrative and equitable agreements.

3.3.1. Method

Participants. Two hundred forty-six individuals ($M_{age} = 21.98$, $SD = 2.19$; 50% female) participated in a lab study at a university in the northeastern United States in exchange for \$20 and the opportunity to earn an additional \$15 based on their performance. We aimed to recruit approximately 80 groups of three participants based on an intuitive power estimate.⁴

Design and procedures. Participants were randomly assigned into one of three roles: the mediator or one of two negotiators. We randomly formed 79 groups of three and instructed mediators in these groups to act in either a nice or hostile way toward both negotiators. Nine participants did not complete the study because the computer algorithm did not match them with two other partners to form a group of three. One group was removed from the dataset because the mediator did not follow the written instructions.

Participants were recruited to the computer lab to complete a study assessing peoples' strategies during negotiations. Negotiators read about their roles, took a quiz about their role, and wrote about the strategies they would adopt in their future interactions. They learned about two opportunities to interact with their counterpart: one meeting with the mediator and another meeting without the mediator. During the first interaction, negotiators discussed their issues in a mediator-led meeting within a virtual chat room and also had the option to send private messages to just their counterparts. After the mediation, negotiators were given a second opportunity to communicate with their counterpart virtually to discuss any remaining issues without the mediator. Finally, negotiators answered a few questions about their counterpart and the mediator.

The negotiation was adapted from "Moms.com," a case that requires negotiators to enter a more cooperative mindset in order to make distributive tradeoffs and find room for integrative agreements (Tenbrunsel and Bazerman 2001).⁵ Half of the negotiators played the role of a television station manager seeking to buy syndication programs whereas the other half played the role of a television producer seeking to sell a television show. Both negotiators learned that they needed to discuss the following issues in order to reach an agreement: number of episode runs, licensing fees, and payment plan. Participants could make tradeoffs across these issues and move beyond the main issues by discussing a purchase of another show to reach more integrative agreements. Participants were incentivized to maximize their personal net value of agreement, which determined the number of lottery tickets entered into a drawing

for an additional \$15. One-third of the negotiators were randomly selected to receive the additional compensation.

Whereas negotiators were incentivized to reach better deals for themselves, mediators were incentivized to act in either a nice or hostile manner as they facilitated discussion and addressed conflicts between the two parties. To encourage equal treatment of both negotiators, one-third of the mediators were randomly selected to receive an additional \$15 if both negotiators in the group identified the mediator as nice or mean, depending on the assigned role. For example, a mediator instructed to be nice and rated as “nice” by both counterparts would have been entered into a lottery for an additional \$15 whereas a mediator rated as “nice” by only one of the counterparts would not have been eligible for the bonus. We provided all mediators with role information about the two negotiators. Mediators sent pre-written messages to both negotiators based on a script provided (e.g., “To start, could you both give a broad overview of the main issues that are important to you?”). Hostile mediators sent more aggressive and mean-spirited messages (e.g., “Now that the two of you have sufficiently wasted my time, I’m relieved I don’t have to hear more about your problems again”) than did nice mediators, who sent more understanding and encouraging messages (e.g., “Thank you for sharing your thoughts with me. I hope this was helpful to the both of you”).

Dependent measures. All items in this experiment were completed using a seven-point scale unless indicated otherwise (1 = not at all, 4 = somewhat and 7 = extremely).

At the end of the experiment, participants in the role of negotiators rated the hostility of the mediator on a three-point scale (1 = *nice*, 2 = *neutral*, 3 = *mean*). We used congruence on this measure to determine whether mediators were eligible to receive additional payment.

Participants completed two items that assessed their perceived social distance from their counterpart and the mediator. Adapted from the Intrinsic Motivation Inventory (Dyrlund and Wininger 2006), the scale consisted of items “I feel close to my mediator,” and “Overall, I had a positive impression of my mediator” ($\alpha_{\text{Negotiator 1}} = .80$, $\alpha_{\text{Negotiator 2}} = .80$). At the end of the experiment, participants rated these two items about their counterpart ($\alpha_{\text{Negotiator 1}} = .80$, $\alpha_{\text{Negotiator 2}} = .80$). Because the two negotiators’ social distance ratings demonstrated moderate to good interrater reliability ($\text{ICC2} > .56$, $p < .001$), we averaged them to compute an overall score for both negotiators. We used this aggregate measure in subsequent analyses. As a behavioral measure of the extent to which participants preferred talking to their counterpart rather than the mediator, we recorded the number of private messages participants sent during the mediation; we further coded these messages for whether they contained discussion about their attitudes toward the mediator.

We recorded the percentage of dyads that reached agreement. To examine the degree to which agreements were integrative, we summed the net value of agreement for both negotiators within each

dyad. The net value of agreement is the value beyond the best alternative to negotiated agreement and is a function of the agreed-upon price per episode, the number of runs per episode, the financing plan, and the price of any additional show purchased. Thus, higher joint net values of agreement indicate more integrative agreements. To measure equity of agreements, we calculated the absolute value of the difference in net value of agreement between the two negotiators and divided this difference by the joint net value of agreement. Thus, larger percentages reflect greater inequity as a proportion of the overall value of agreement that is not equally shared between the two negotiators: a value of 0% indicates an equal split whereas a value of 100% indicates complete inequity in that one negotiator captured all of the value.

3.3.2. Results and Discussion

Table 1 reports means and standard deviations of dependent variables measured in this study.

Manipulation check: Mediator's hostility. Hostile mediators were rated as meaner ($M = 2.74$, $SD = .41$) than nice mediators ($M = 1.65$, $SD = .37$), $t(76) = 12.42$, $p < .001$, $d = 2.85$.

Insert Table 1 about here

Social distance to counterpart and mediator. Participants felt closer to nice mediators ($M = 4.01$, $SD = .87$) than to hostile mediators ($M = 1.84$, $SD = 1.03$), $t(76) = 10.03$, $p < .001$, $d = 2.30$. In contrast, participants felt marginally closer to their partners after interacting with a hostile mediator ($M = 4.32$, $SD = 1.24$) than a nice one ($M = 3.84$, $SD = .90$), $t(76) = 1.94$, $p = .06$, $d = .45$.

Participants also sent more private messages to each other when they were in the presence of a hostile mediator ($M = 13.39$, $SD = 14.37$) than a nice mediator ($M = 3.27$, $SD = 6.21$) based on a non-parametric Mann-Whitney U analysis, $z = 4.18$, $p < .001$, $r = .47$, suggesting that participants preferred interacting with their counterparts more during their meeting with a hostile mediator than a nice one. Within the 38% of nice-mediator dyads and 80% of hostile-mediator dyads in which negotiators sent private messages to each other, those interacting with a hostile mediator were more likely to discuss their attitudes about the mediator (64%, 21/33) than those interacting with a nice mediator (27%, 3/11), $\chi^2(1, N = 47) = 7.01$, $p = .008$, Cramér's $V = .39$.

Agreements. Negotiators in the presence of a hostile mediator were more likely to reach agreement with their counterpart (85%, 35/41) than those in the presence of a nice mediator (59%, 22/37), $\chi^2(1, N = 78) = 6.63$, $p = .01$, Cramér's $V = .29$. Immediately after interacting with the mediator but before interacting on their own, negotiators did not appear more likely to reach agreements in the hostile-mediator condition (27%, 11/41) than the nice-mediator condition (14%, 5/37), $\chi^2(1, N = 78) = 2.12$, $p = .15$, Cramér's $V = .17$.

There was an opportunity during the negotiation to bring an outside issue onto the table that would allow for more value creation benefiting both parties. This issue entailed the discussion of “Juniors,” a separate show that could have generated additional value for both parties. During the mediation meeting, negotiators in the presence of a hostile mediator were more likely to discuss “Juniors” in their agreements (27%, 11/41) than those in the presence of a nice mediator (0%, 0/37), $\chi^2(1, N = 78) = 11.56, p < .001$, Cramér’s $V = .39$. However, after participants had the opportunity to discuss the issues privately, we found no difference in the proportion of final agreements that included “Juniors” between negotiators in the hostile mediator condition (59%, 24/41) than those in the nice mediator condition (51%, 19/37), $\chi^2(1, N = 78) = .41, p = .52$, Cramér’s $V = .07$.⁶

The degree to which the agreements reached were integrative – as measured by the total net value of agreement (in millions of dollars) for both parties, including both those who did and did not reach agreement – did not differ significantly between the hostile- ($M = 2.71, SD = 1.45$) and nice-mediator conditions ($M = 2.17, SD = 1.89$), non-parametric Mann-Whitney U test, $z = .91, p = 0.36, r = .10$. Of the final agreements made (i.e., excluding those who did not reach agreement), the integrative nature of resolutions reached did not differ between negotiators who interacted with a hostile mediator ($M = 3.27, SD = .83$) and a nice mediator ($M = 3.65, SD = .69$), $z = 1.48, p = .14, r = .17$. Nonparametric Mann-Whitney U tests revealed that hostile mediators were associated with more inequitable agreements ($M = 34%, SD = 39.39$) than were nice mediators ($M = 22%, SD = 36.50$), $z = 2.05, p = .04, r = .23$.

Mediation analysis. We tested whether perceived social distance from the counterpart explains the effect of the mediator’s hostility on participants’ propensity to reach agreement (Baron & Kenny, 1986). The hostile-mediator manipulation was marginally associated with perceptions of reduced social distance from the counterpart ($\beta = .22, t = 1.94, p = .06$) (Table 2). Using a logistic regression, we found that mediator hostility increased the proportion of agreements reached ($B = 1.38, \text{Wald } \chi^2 = 6.20, p = .01$). Controlling for perceived social distance from the counterpart directionally reduced the effect of the hostile mediator (from $B = 1.38, \text{Wald } \chi^2 = 6.20, p = .01$ to $B = 1.26, \text{Wald } \chi^2 = 4.68, p = .03$), and social distance from the counterpart predicted agreements reached ($B = .70, \text{Wald } \chi^2 = 5.86, p = .016$). A bootstrap analysis using 100,000 iterations indicated that the 95% bias-corrected confidence interval for the size of the indirect effect included zero (-.003, 1.07) (MacKinnon et al., 2007). These findings present the possibility that social distance partially explains the hostile mediator effect on negotiators’ propensity to reach agreement. We test for further evidence of this possible mechanism in Experiment 3.

Insert Table 2 about here

These findings suggest that interacting with hostile mediators reduces perceived social distance between negotiators and increases negotiators' propensity to reach agreement. An analysis of the extent to which the agreements reached were integrative revealed no significant difference between the nice- and hostile-mediator conditions, suggesting that hostile mediators did not force negotiators to make agreements at the expense of sacrificing agreement quality. We note that hostile mediators also generated more inequitable agreements. It is possible that agreements reached after exposure to a hostile mediator involved one negotiator making more concessions than the other. In a subsequent study (Experiment 4), we test whether these results hold in a context with a different points allocation system to determine whether increased inequity in agreements is necessarily an outcome of increased hostility from mediators or an artifact of the particular negotiation we used in Experiment 2.

Furthermore, this experiment demonstrates that mediator hostility is effective in negotiation contexts in which parties' alternatives to reaching agreement were independent from one other – that is, they could walk away from reaching a deal without negatively impacting their alternatives to reaching an agreement. In our next studies, we investigate the role of mediator hostility in conflicts where negotiators' outcomes and their alternatives are more interlinked.

3.4. Experiment 3: Common Enemy as Mechanism

Experiment 3 focuses on the mechanisms driving the hostile mediator effect. Beyond creating a common enemy against which participants feel united – as our account holds – mediators may also serve as points of comparison that may influence how participants evaluate their counterparts. Based on research documenting contrast effects in social comparisons (Manstead et al. 1983, Rafaeli and Sutton 1991), negotiators with hostile mediators might think, “My counterpart doesn't seem so bad compared to this mediator!” Conversely, the presence of a nice mediator may lead negotiators to think, “Why can't my counterpart be as kind as this mediator?”

More specifically, individuals may compare their counterparts against the mediator on the dimensions of warmth and competence – two primary dimensions on which individuals make judgments of others and which have been shown to influence individuals' emotions, attitudes, and behaviors (Cuddy et al. 2008, Fiske et al. 2002, Laceyfield 2008, Wiggins 1979). One possibility is that individuals with hostile mediators may perceive their counterparts as warmer and more competent relative to a hostile mediator who appears unable to fulfill the core competency of appearing reasonable and understanding. In this study, we test whether enhanced perceptions of the counterpart's warmth and competence contribute to our findings in addition to perceptions of a common enemy.

Another possible explanation for our findings is that hostility from the mediator is unexpected, distracting participants from the primary conflict. In this study, all participants were informed that mediators engage in a variety of different behaviors, ranging from nice to hostile. We measured whether

they expected the mediator's behaviors and controlled for expectancy violations in our analyses. Finally, two alternative explanations include making agreements to avoid the mediator as well as believing that the mediator would act as an arbiter who has the authority to make binding decisions. Prior to the mediation, participants were informed that they would not have any future opportunities to interact with the mediator beyond the mediation meeting and that the mediator could not make any binding decisions on their behalf. All participants acknowledged their understanding of these points prior to entering the mediation.

Additionally, Experiment 2 and 3 differ in terms of the type of disagreement between negotiators and the experimental design. Whereas Experiment 2 featured a negotiation in which participants could uncover shared interests, Experiment 3 and all following experiments feature conflicts in which both parties have interlinked outcomes and believe that their current aspirations cannot be achieved simultaneously. Furthermore, whereas participants in Experiment 2 interacted in a live mediation with other participants who played the role of their counterpart and mediator, participants in Experiment 3 interacted in a pre-scripted mediation in which the mediator and counterparts' responses were saved on a computer program that populated these pre-scripted messages in response to the participants' messages. Using these pre-scripted messages adapted from Experiment 1 ensured that all participants experienced identical degrees of hostility, allowing us to assess the mechanisms driving the hostile mediator effect in a more controlled setting.

3.4.1. Method

Participants. Eighty-eight individuals ($M_{age} = 34.3$, $SD = 10.35$; 50% female) were recruited from Amazon's Mechanical Turk to complete a 20-minute study on conflict resolution in exchange for \$1.50, a standard rate at the time the study was conducted. We aimed to recruit approximately 90 participants based on an intuitive power estimate.⁷

Design and procedure. Participants were randomly assigned to either a nice or hostile mediator; they participated in a virtual mediation and were led to believe that their counterpart and mediator were other participants in the study.

Participants read about their role, adapted from the Viking Investments dispute in Experiment 1 (Greenhalgh, 1993) – a conflict about which party is responsible for unexpected increases in the cost of a building project. Similar to Experiment 1, all participants played the role of Sandy Wood, a carpenter who decided to upgrade the quality of wood used in the condominium that Pat Olafson was developing based on prior conversations with Pat about the importance of using premium quality goods. However, Sandy's decision to upgrade the materials used for the building project generated an unexpected increase in \$300,000 of total costs. After reading information about their role, participants were led to believe that

they would have a chance to interact with a mediator and counterpart.⁸ In fact, all participants interacted with a computer programmed to provide responses for both the mediator and counterpart.

Prior to the simulated mediation meeting, participants wrote, “What you would like your counterpart to know? Your mediator facilitating the discussion will have the opportunity to read what you wrote and include your perspective during the mediation.” To ensure that participants understood the difference between a mediator, whose role was to facilitate dispute resolution, and an arbiter, whose role is to determine outcomes for both parties, participants read, “The mediator cannot make decisions for you or force you to reach a particular outcome.” And to ensure that participants knew that they would not meet with the mediator again, they read, “After the meeting with the mediator, you will not be able to meet with the mediator again.” All participants also checked boxes indicating that they understood both points prior to entering the negotiation. Additionally, whereas negotiators in prior experiments may not have been prepared for mediators to be hostile, negotiators in this study were informed, “mediators engage in a variety of different behaviors, ranging from nice to hostile.”

To simulate a real-time mediation, all participants waited 42 seconds before entering the mediation meeting in a virtual chat room where negotiators could read what the mediator was discussing. Mediators wrote the following in the nice and hostile conditions (see Appendix C for a full transcript):

Hostile mediator: “Hi, I’m Jamie. I’m your mediator for today. I can't decide what happens in this dumb dispute or how you resolve issues. My job is just to help people who are incapable of reaching conflict, like yourselves, find areas that you can agree on. That means I get to control what appears in the messages, which is a good thing since it seems like the two of you are incapable of making any smart decisions. I just want to say that this better be good. I DON'T like to waste my time.”

Nice mediator: “Hi, I’m Jamie. I’m your mediator for today. I can't decide what happens in this dispute or how you resolve issues. My job is just to help people who are in conflict, like yourselves, find areas that you can agree on. That means I get to determine what appears in the messages. I hope that this meeting is helpful for the both of you. Let's get started.”

After these introductions, the mediator explained, “Ok, let's see what kind of [issues/ annoying complaints] are on the table today. First up is Pat.” To increase realism in the study, all participants then read their counterpart Pat’s message, which was adapted from a response that a participant who played the counterpart’s role in a prior study wrote in response to the question, “What would you like your counterpart to know?”:

“I was pretty dismayed to find out that Sandy upgraded the quality of wood without my permission. We had agreed to stick to the contract, and so I left to go on vacation trusting that Sandy would honor that contract. I think Sandy might have wanted to do an extra good job, but in the process, upgrading to wood that cost \$300,000 more than expected means that we will be losing money. Sandy might have assumed that we could increase the charge of the apartment, but I actually sold the apartment to another developer, which

means that I'll be losing money on the \$300,000 increase in cost. I hope we get to discuss what to do.”

The mediator then displayed participants' responses to the same question and ended the meeting prior to discussion of possible outcomes that would resolve the dispute. Participants then answered questions about their willingness to reach agreement and their perceptions of both the counterpart and mediator.

Dependent measures. All items in this study were assessed using a seven-point scale, unless indicated otherwise (1 = *not at all*, 4 = *somewhat*, and 7 = *extremely*).

After interacting with the mediator, participants rated their willingness to reach agreement with their counterpart on the following items: 1) “How likely do you think you would be to reach an agreement with your counterpart?” 2) “How willing do you think you would be to concede on issues that are important to you?” 3) “How flexible do you think you would be in your demands?” and 4) “How motivated are you to reach agreement with your counterpart?” ($\alpha = .75$).

Participants also rated social distance to their counterpart based on the following items (adapted from Dyrlund & Wininger, 2006): “I'd like a chance to interact with my counterpart outside of the negotiation context,” “I feel close to my counterpart,” “I felt like I could really trust my counterpart,” and “It is likely that my counterpart and I could become friends if we interacted a lot” ($\alpha = .83$). As a measure of perceived closeness to their partner (Aron, Aron & Smollan, 1992), participants were presented with a series of images containing two circles of varying degrees in overlap and selected the one that best described their relationship with their counterpart (1 = *no overlap* to 5 = *almost complete overlap*).

To measure perceptions of a common enemy, participants rated the following questions on a 7-point scale (1 = *not at all* to 4 = *somewhat* to 7 = *very much*): “I feel like Pat and I would agree on our negative perceptions of the mediator,” “I feel like Pat and I would agree on our perceptions of the mediation meeting,” “I feel like Pat and I share a common purpose,” “I feel like Pat and I would agree on our attitudes toward the mediator,” and “I feel like Pat and I would agree on our overall impression of the mediation” ($\alpha = .81$).

At the end, participants rated the extent to which they perceived the counterpart and mediator as mean. Participants also evaluated both the counterpart's and mediator's warmth (tolerant, warm, good natured, sincere; $\alpha_{\text{mediator}} = .75$; $\alpha_{\text{counterpart}} = .91$) and competence (confident, competent, independent, intelligent; $\alpha_{\text{mediator}} = .77$; $\alpha_{\text{counterpart}} = .78$; Cuddy et al. 2008, Fiske et al. 2002). Lastly, they indicated the extent to which they were prepared for “how the mediator acted during the mediation.”

3.4.2. Results and Discussion

Willingness to reach an agreement. As in prior studies, negotiators were more willing to reach agreement after interacting with a hostile mediator ($M = 3.83, SD = .97$) than a nice one ($M = 3.27, SD = 1.00$), $t(86) = 2.65, p = .01, d = .57$.

Perceptions of counterpart. Participants felt like they had more of a shared enemy after interacting with a hostile mediator ($M = 4.68, SD = .98$) than a nice one ($M = 3.61, SD = 1.01$), $t(86) = 5.04, p < .001, d = 1.08$. Participants felt closer to their counterpart on the social distance measure in the hostile mediator condition ($M = 3.76, SD = 1.19$) than in the nice mediator condition ($M = 3.13, SD = 1.08$), $t(86) = 2.57, p = .01, d = .55$. Based on the selection of the two circles that best depicted their relationship to their counterpart, participants felt closer to their counterpart after interacting with a hostile mediator ($M = 2.65, SD = 1.13$) than a nice one ($M = 2.04, SD = .95$), $t(86) = 2.73, p = .008, d = .59$. Participants also perceived their counterpart as warmer when negotiating in the presence of a hostile mediator ($M = 3.78, SD = 1.11$) than a nice one ($M = 3.32, SD = 1.28$), $t(86) = 1.83, p = .07, d = .39$. We did not find differences in perceptions of the counterpart's competence as a result of interacting with a hostile ($M = 4.59, SD = .93$) or nice mediator ($M = 4.49, SD = 1.15$), $t(86) = .47, p = .64, d = .10$, suggesting that increased perceptions of competence do not drive the impact of mediator hostility on negotiators' willingness to reach agreement.

Perceptions of mediator. Similar to Experiments 1-3, participants rated the mediator as meaner in the hostile-mediator condition ($M = 6.09, SD = .95$) than in the nice-mediator condition ($M = 2.09, SD = 1.56$), $t(86) = 14.45, p < .001, d = 3.12$. Participants perceived the mediator as warmer and more competent when negotiating in the presence of a nice mediator ($M_{warm} = 4.36, SD_{warm} = .99, M_{competent} = 4.37, SD_{competent} = 1.23$) than a hostile one ($M_{warm} = 2.38, SD_{warm} = .95, M_{competent} = 3.81, SD_{competent} = 1.16$), $t_{warm}(86) = 9.55, p_{warm} < .001, d_{warm} = 2.06, t_{competent}(86) = 2.19, p_{competent} = .03, d_{competent} = .47$.

Mediator expectations. Although negotiators were informed about the wide range of behaviors in which mediators could engage, those who interacted with a hostile mediator ($M = 3.56, SD = 1.72$) felt marginally less prepared than did those who interacted with a nice mediator ($M = 4.29, SD = 1.87$), $t(86) = -1.91, p = .06, d = -.41$.

Mediation analysis. We examined whether perceptions of having a common enemy, perceived social distance to the counterpart, and counterpart's warmth would mediate the effect of the mediator's hostility on negotiators' willingness to reach agreement (Baron & Kenny, 1986).⁹ We tested these statistical mediators in separate analyses and present the results in Table 3. The hostile-mediator manipulation was positively associated with perceptions of having a common enemy ($\beta = .48, t = 5.04, p < .001$) and of social distance to the counterpart ($\beta = .27, t = 2.57, p = .01$), and marginally associated with perceptions of having a warmer counterpart ($\beta = .19, t = 1.83, p = .07$). In a test of the main effect, mediator hostility increased willingness to reach agreement ($\beta = .28, t = 2.65, p = .01$). When controlling

for perceptions of having a common enemy, the effect of the hostile mediator became non-significant ($\beta = .04, t = .37, p = .71$), and perceptions of having a common enemy predicted willingness to reach agreement ($\beta = .49, t = 4.66, p < .001$). When controlling for perceptions of social distance to the counterpart, the effect of the hostile mediator was reduced to non-significance ($\beta = .14, t = 1.50, p = .14$), and perceptions of social distance predicted willingness to reach agreement ($\beta = .50, t = 5.37, p < .001$). When controlling for perceptions of the counterpart's warmth, the effect of mediator hostility remained significant ($\beta = .18, t = 1.94, p = .06$), and perceptions of the counterpart's warmth predicted willingness to reach agreement ($\beta = .52, t = 5.69, p < .001$). A bootstrap analysis indicated that the 95% bias-corrected confidence interval for the size of the indirect effect of having a common enemy (.13, .38) and of social distance excluded zero (.04, .27), suggesting significant indirect effects (MacKinnon et al., 2007), whereas the indirect effect through counterpart's warmth (-.001, .22) included zero.

Insert Table 3 about here

To assess whether expectancy violations explained our findings, we conducted the same mediation analysis controlling for the extent to which participants felt prepared for the mediators' behavior during the meeting. Expectancy violation was not associated with greater willingness to reach agreement when examining the relationship between the hostile-mediator manipulation and willingness to reach agreement ($\beta = .17, t = 1.57, p = .12$), and when including perceptions of a common enemy, social distance, and counterpart's warmth as statistical mediators ($\beta = .13, t = 1.43, p = .16$). The relationships among other variables remain unchanged, and we continued to find that the 95% bias-corrected confidence interval for the size of the indirect effect of having a common enemy (.004, .44) and of social distance (.02, .38) excluded zero, but that of the indirect effect of counterpart's warmth (-.001, .35) included zero.

Taken together, we find that hostile mediators served as a common enemy, increasing negotiators' willingness to reach agreement. In a bootstrap analysis, mediation results demonstrate that increased perceptions of having a common enemy and reduced perceptions of social distance to the counterpart drive the hostile mediator effect. In the following study, we test the extent to which the common mediator effect not only drives willingness to reach agreement but also outcomes in disputes.

These results also address two alternative explanations: that participants were more willing to reach agreement in order to avoid future interactions with the mediator and that they felt that mediators would make binding decisions. All negotiators acknowledged understanding that they would not have the opportunity to interact with the mediator after the initial meeting and that their mediator could not make decisions on their behalf. Additionally, another possible explanation for our findings in Experiments 1

and 2 was that individuals were distracted by the mediator's unexpected hostility, preventing individuals from being able to focus on primary issues of convention. In our analyses, we controlled for the extent to which the mediator's actions were unexpected, suggesting that mediator hostility impacts willingness to reach agreement beyond merely violating negotiators' expectations of mediators' behaviors.

3.5. Experiment 4: Dispute Outcomes

In Experiment 4, we test our full theoretical model that hostility from mediators creates feelings of a common enemy that increases willingness to reach agreement and enables negotiators to reach better solutions. We sought to replicate findings from Experiments 2 and 3 in the context of a dispute between two negotiators, who interacted with either a hostile or nice mediator. This incentive-compatible conflict was adapted from a dispute exercise commonly used in negotiation classes. Furthermore, trained mediators interacted with negotiators to increase control over the content discussed during the mediations.

3.5.1. Method

Participants. Five hundred fourteen individuals ($M_{age} = 34.48$, $SD = 10.70$; 49% female) were recruited in an online study on Mechanical Turk in exchange for \$3, a standard market rate at the time the study was conducted. Of these individuals, 272 ($M_{age} = 34.25$, $SD = 10.58$; 46% female) entered conflict mediation based on a computer algorithm that randomly matched participants who were ready to interact with their counterpart. The remaining participants who did not have a counterpart ready to negotiate with them were compensated \$0.50. We did not find demographic differences in gender and age between participants who had the opportunity to enter mediation and those who did not, $t_{age} = .53$, $p_{age} = .60$, $\chi_{gender}^2 = 2.36$, $p_{gender} = .13$). We aimed to recruit approximately 240 participants forming 120 dyads based on an intuitive power estimate.¹⁰

Design and procedures. Participants paired with a counterpart were randomly assigned to interact with a hostile or nice mediator. Two research assistants blind to the hypotheses of the study were trained to act in either a hostile or nice manner toward both negotiators (see Appendix D for more details).

Mechanical Turk participants were recruited to complete a study assessing peoples' strategies during conflict. After reading about their roles, participants took a quiz about the conflict and wrote about the strategies they would adopt in their future interactions. Participants then discussed their issues with their counterpart in a mediator-led meeting within a virtual chat room for fifteen minutes. Finally, negotiators answered a few questions about their impressions of their counterpart and mediator.

The dispute was adapted from "Miti-pet," an exercise requiring parties in conflict to find distributive and integrative solutions in order to resolve outstanding conflicts and cooperate in the future (Schroth, Corniola & Voit, 2006). Half of the negotiators played the role of a restaurant owner, who was enraged at the other party, a produce supplier, for a delayed shipment that led to financial loss for the restaurant owner. Beyond this dispute, there is also room to find distributive and integrative solutions in

negotiating terms of a future contract. Both negotiators were instructed to discuss the following issues (see Table 4 for the payoff table and Appendix E for role information): refund amount, produce order, meat order, and delivery frequency. Two of these issues (refund amount and delivery schedule) were distributive whereas the other two issues (meat and produce order) were integrative. The distributive option (i.e., taking the middle option for all issues) would have led both parties to earn 10,400 in points whereas a more integrative approach in which negotiators trade off on issues that differ in level of importance for both parties (i.e., produce and meat orders) would yield negotiators 12,800 points in total. Participants were informed that if they did not come to agreement on an issue, they would receive the lowest value for that issue. Participants were incentivized to maximize their personal net value of agreement, which determined the number of lottery tickets entered into a drawing for an additional \$10. One-third of the negotiators were randomly selected to receive the additional compensation.

Insert Table 4 about here

Dependent measures. All items in this experiment were assessed using a seven-point scale unless indicated otherwise (1 = not at all, 4 = somewhat and 7 = extremely).

As in Experiment 2, we examined the degree to which agreements were integrative based on the sum of total points for both negotiators within each dyad. These points are based on agreements made on each issue of contention. We also calculated the equity of agreements based on procedures described in Experiment 2.

After the mediation meeting, participants rated the extent to which they were willing to reach an agreement with their counterpart ($\alpha_{\text{Negotiator 1}} = .81$, $\alpha_{\text{Negotiator 2}} = .77$) and felt that they shared a common enemy based on items in Experiment 3 ($\alpha_{\text{Negotiator 1}} = .84$, $\alpha_{\text{Negotiator 2}} = .87$).

Participants also rated their counterpart's warmth ($\alpha_{\text{Negotiator 1}} = .95$, $\alpha_{\text{Negotiator 2}} = .93$) and competence ($\alpha_{\text{Negotiator 1}} = .88$, $\alpha_{\text{Negotiator 2}} = .92$) based on items in Experiment 2.

At the end of the experiment, participants rated the hostility of the mediator as well as the mediator's warmth ($\alpha_{\text{Negotiator 1}} = .96$, $\alpha_{\text{Negotiator 2}} = .97$) and competence ($\alpha_{\text{Negotiator 1}} = .91$, $\alpha_{\text{Negotiator 2}} = .93$). Across all items, the two negotiators' ratings demonstrated good inter-rater reliability as in Experiment 2 ($ps < .001$), and we averaged them to compute an overall score for both negotiators.

3.4.2. Results and Discussion

Table 5 presents the means and standard deviations of dependent variables measured in this study.

Insert Table 5 about here

Willingness to reach an agreement. Negotiators in the presence of a hostile mediator were more willing to reach agreement with their counterpart ($M = 4.88$, $SD = .82$) than those in the presence of a nice mediator ($M = 4.46$, $SD = .97$), $t(134) = 2.70$, $p = .008$, $d = .47$.

Quality of dispute resolution. The quality of the agreements – as measured by the total score for both parties – was greater for those who interacted with a hostile mediator ($M = 5,921.21$, $SD = 3,902.33$) than a nice one ($M = 4,268.57$, $SD = 3,223.80$), based on results from a non-parametric Mann-Whitney U test, $z = 2.39$, $p = 0.017$, $r = .20$. Nonparametric Mann-Whitney U tests revealed that hostile mediators in this study were associated with more equitable agreements ($M = 49\%$, $SD = 38.82$) than were nice mediators ($M = 63.68\%$, $SD = 41.05$), $z = 1.92$, $p = .05$, $r = .16$. Thus unlike in Experiment 2, we find evidence that hostile mediators increase both willingness to agree and the quality of agreements.

Common enemy. Hostile mediators influenced negotiators to feel more as though they had a shared common enemy ($M = 3.92$, $SD = 1.04$) relative to nice mediators ($M = 3.51$, $SD = 1.03$), $t(134) = 2.41$, $p = .02$, $d = .42$.

Perceptions of counterpart. In contrast, participants perceived their counterpart as warmer when negotiating in the presence of a hostile mediator ($M = 4.58$, $SD = 1.31$) than a nice one ($M = 4.14$, $SD = 1.27$), $t(134) = 2.00$, $p = .047$, $d = .35$. We found no differences in perceptions of the counterpart's competence as a result of interacting with a hostile ($M = 5.01$, $SD = 1.03$) or nice ($M = 4.85$, $SD = .95$) mediator, $t(134) = .99$, $p = .33$, $d = .17$.

Perceptions of mediator. Hostile mediators were rated as meaner ($M = 5.54$, $SD = 1.23$) than nice mediators ($M = 1.56$, $SD = .76$), $t(134) = 22.81$, $p < .001$. Participants perceived the mediator as warmer and more competent when negotiating in the presence of nice mediator ($M_{warm} = 4.69$, $SD_{warm} = 1.15$, $M_{competent} = 4.60$, $SD_{competent} = 1.20$) than a hostile one ($M_{warm} = 1.91$, $SD_{warm} = .93$, $M_{competent} = 2.95$, $SD_{competent} = 1.17$), $t_{warm}(134) = 15.40$, $p_{warm} < .001$, $d_{warm} = 2.66$, $t_{competent}(134) = 8.10$, $p_{competent} < .001$, $d_{competent} = 1.40$.

Path Analysis. Next, we tested our full theoretical model: mediator hostility leads negotiators to perceive a common enemy with their counterpart and become more willing to reach an agreement with their counterpart, ultimately influencing negotiators to reach better quality agreements (see Figure 1). We used structural equation modeling (SEM) with maximum likelihood estimation procedures. Following recommendations from Anderson and Gerbing (1988), a confirmatory factor analysis demonstrated that perceptions of having a common enemy and willingness to reach agreement loaded as distinct factors ($\chi^2 [136] = 26.16$, CFI = .98, RMSEA = .09, RMSEA confidence interval = .04, .13). To examine whether this was the most parsimonious model, we compared this two-factor model against a model in which perceptions of common enemy and willingness to reach agreement loaded as one factor. The one-factor

model displayed poorer fit on all indices ($\chi^2 [136] = 82.34$, CFI = .89, RMSEA = .19, RMSEA confidence interval = .15, .23).

The results of the three-path analysis as prescribed by Taylor, MacKinnon, and Tein (2008) are summarized in Figure 1. The model demonstrated excellent fit with the data according to Hu and Bentler's (1999) cut-off values ($\chi^2 [136] = 44.82$, CFI = .97, RMSEA = .08, RMSEA confidence interval = .05, .12). We note that this model is a better fit of the data than an alternative model in which perception of a common enemy and willingness to reach agreement act simultaneously to impact outcomes of the dispute ($\chi^2 [136] = 118.29$, CFI = .86, RMSEA = .17, RMSEA confidence interval = .14, .20).

Consistent with our predictions, the extent to which participants perceived themselves as having a common enemy positively affected the degree to which they were willing to reach agreement with their counterparts ($\beta = .61$, s.e. = .07, $p < .001$), and the effect of our hostility manipulation on the degree to which negotiators were willing to reach agreement with their counterparts was no longer statistically significant when perception of a common enemy was added to the model (from $\beta = .51$, s.e. = .16, $p = .002$ to $\beta = .24$, s.e. = .13, $p = .06$). We then regressed quality of agreement with the counterpart on our hostility manipulation and included perception of a common enemy and willingness to reach agreement as statistical mediators. Willingness to reach agreement significantly predicted quality of agreements reached ($\beta = .53$, s.e. = .18, $p = .003$), and the direct effect of our hostile mediator manipulation on the quality of agreements reached was reduced when the mediators were included in the model (from $\beta = .45$, s.e. = .17, $p = .007$ to $\beta = .16$, s.e. = .15, $p = .29$).

We used a bootstrap procedure to test the magnitude of our indirect effects, consistent with the approach recommended by Taylor, MacKinnon, and Tein (2008). The 95% bias-corrected confidence interval of the size of the indirect effects of perceptions of a common enemy and willingness to reach agreement excluded zero (.01, .10), indicating significant indirect effects (MacKinnon et al. 2004, Shrout and Bolger 2002).¹¹

Insert Figure 1 about here

Together, these results support our conceptual model that hostility leads participants to experience sharing a common enemy with their counterpart, increasing their willingness to reach agreements with that counterpart – and the quality of solutions they achieve. Whereas Experiment 2 showed that agreements reached in the presence of hostile mediators were no more integrative and less equitable, agreements in this experiment were more integrative and slightly more equitable, perhaps because the points in this dispute were easier to calculate, allowing participants to reach solutions that were comparable for both sides. Further research is needed to understand the impact of hostility on the

distribution of value added from negotiation between partners in negotiations, and the boundary conditions in which mediator hostility might lead negotiators to make unnecessary or suboptimal concessions.

3.6. Experiment 5: Bilateral vs. Unilateral Hostility

Whereas Experiment 4 demonstrated through mediation analysis that hostile mediators increase willingness to reach agreement by creating the feeling of a shared enemy, Experiment 5 aims to test this common enemy hypothesis via moderation, by directly manipulating whether negotiators shared a common enemy. Using the same paradigm as in Experiment 3, we varied the target of the hostility: either toward both negotiators (bilateral hostility) or toward one negotiator (unilateral hostility). We hypothesized that bilateral hostility would be more effective in creating the feeling of a common enemy than unilateral hostility. Consequently, we hypothesized that relative to nice mediators, bilaterally hostile mediators would increase willingness to reach agreement whereas unilaterally hostile mediators would not increase willingness to reach agreement.

Finally, whereas previous studies directly asked individuals for their willingness to reach agreement, Experiment 5 assessed what amount negotiators would demand from their counterpart.

3.6.1. Method

Participants. One hundred thirty-nine individuals recruited through Mechanical Turk participated in a twenty-minute online study in exchange for \$1.50, a standard market rate at the time the experiment was conducted. We aimed to recruit approximately 140 participants based on an intuitive power estimate.¹²

Design and procedure. Participants were randomly assigned to one of the following conditions: mediator hostile to both negotiators, mediator hostile to only the participant but not the counterpart, or mediator nice to both parties. As in Experiment 3, participants read about their role as a carpenter in disagreement with a developer over who should cover unexpected incurred costs. They were also led to believe that they were interacting with other participants playing the role of their mediator and counterpart. Prior to the mediation meeting, all participants were informed and acknowledged their understanding that their mediator could not make any decisions of the behalf of participants during the mediation meeting and that participants would not have the chance to interact with the mediator after the meeting ends.

Mediators in the bilateral hostile mediator condition were programmed to direct equally mean comments toward both negotiators. In contrast, mediators in the unilateral hostile mediator condition were programmed to direct mean comments to just the participant but act in a nice way toward the counterpart, and mediators in the nice condition were programmed to be equally nice to both parties.

Bilaterally hostile mediator: “Ok, let's see what kind of annoying complaints are on the table today. First up is Pat. Here's what Pat said... [Pat provides responses as described in Study 4]. Wow, it seems like the two of you made some pretty bad decisions. Pat, why would you go on vacation? Sandy, why didn't you just follow the contract? I can't believe that this issue is taking so long to go over – the two of you are just wasting my time. Ok, now that we've heard about Pat's issues, here are Sandy's first world problems. [Participants' responses as Sandy].”

Unilaterally hostile mediator: “Ok, let's see what issues are on the table today. First up is Pat. Here's what Pat said. [Pat provides responses as described in Study 4]. Thank you for sharing your perspective, Pat. I understand that it is tough to make decisions while the both of you were away. But Sandy, why didn't you just follow the contract? Now that we've heard about Pat's issues, here are Sandy's first world problems. [Participants' responses as Sandy].”

Bilaterally nice mediator: “Ok, let's see what issues are on the table today. First up is Pat. Here's what Pat said. [Pat provides responses as described in Study 4]. Thank you for sharing your perspective, Pat. I understand that it is tough to make decisions while the both of you were away and unable to communicate with one another. Now we will learn from what Sandy experienced. Here's what Sandy wrote [Participants' responses as Sandy].”

Dependent measures. All items in this experiment were assessed using a seven-point scale unless indicated otherwise (1 = *not at all*, 4 = *somewhat*, 7 = *extremely*).

After the mediation, we indirectly measured negotiators' willingness to reach agreement by asking negotiators, “How much of the \$300,000 in unexpected costs would you demand from the other side?” Lower demands reflect greater willingness to reaching an agreement.

Similar to the prior study, we asked participants about the extent to which they shared a common enemy based on items in Experiment 3 ($\alpha = .85$). Participants then rated the mediator on the extent to which the mediator was mean to them and their counterparts, warm ($\alpha = .95$), and competent ($\alpha = .76$).

3.6.2. Results and Discussion

Willingness to reach an agreement. We conducted a between-subjects ANOVA using participants' demands from their counterpart as the dependent variable. This analysis revealed a significant effect for mediator's level and directedness of hostility, $F(2, 134) = 6.86, p < .001, \eta_p^2 = .09$. Post-hoc tests using LSD corrections indicated that participants in the bilateral hostile-mediator condition demanded less from their counterpart ($M = \$149,457, SD = 65,642$) compared to participants in the unilateral hostile mediator condition ($M = \$208,807, SD = 74,379, p < .001$) and the nice-mediator condition ($M = \$183,567, SD = 85,616, p = .04$). The difference between the latter two conditions was not significant ($p = .11$).

Perceptions of common enemy. An ANOVA on perceptions of mediator hostility revealed significant differences across the three conditions, $F(2, 134) = 10.82, p < .001, \eta_p^2 = .14$. In post-hoc analyses using LSD corrections, we found that interacting with a mediator who directed hostility

bilaterally toward both negotiators led to greater feelings of a common enemy ($M = 4.67$, $SD = 1.54$) compared to interacting with a mediator who directed hostility toward only the participant ($M = 3.20$, $SD = 1.64$, $p < .001$) or a mediator who was nice toward both parties ($M = 3.79$, $SD = 1.35$, $p = .006$). The difference in this rating between these last two conditions was marginally significant such that those in the unilateral hostile mediator condition reported feeling less of a common enemy relative to those in the nice mediator condition ($p = .06$).

Mediator hostility. We found differences across conditions in participants' perceptions of the hostility directed toward themselves, $F(2, 136) = 144.72$, $p < .001$, $\eta_p^2 = .68$. These results indicate that our manipulation of mediator hostility was effective. Post-hoc tests using an LSD correction indicated that participants in the nice-mediator condition rated the mediator as less mean to themselves ($M = 1.79$, $SD = 1.30$) than did participants in both the bilateral hostile-mediator ($M = 5.62$, $SD = 1.32$, $p < .001$) and the unilateral hostile-mediator conditions ($M = 6.13$, $SD = 1.42$, $p < .001$). Participants also believed their mediator in the unilateral condition was slightly meaner than the mediator in the bilateral condition ($p = .08$).

We also tested for differences in perception of hostility directed to just the counterpart as a manipulation check that individuals recognized unilateral hostility was not directed toward both negotiators, $F(2, 136) = 94.22$, $p < .001$, $\eta_p^2 = .58$. Post-hoc tests using an LSD correction indicated that participants in the bilateral hostile-mediator condition rated the mediator as meaner to their counterpart ($M = 5.58$, $SD = 1.29$) than did participants in both the unilateral hostile-mediator ($M = 2.36$, $SD = 1.61$, $p < .001$) and the nice-mediator conditions ($M = 1.81$, $SD = 1.33$, $p < .001$). Participants also believed their mediator in the unilateral condition was slightly meaner than the mediator in the nice condition ($p = .06$).¹³

Mediation analysis. We examined whether perceptions of having a common enemy mediate the effect of the mediator's directed hostility on negotiators' demands in a hierarchical ordinary least-squares (OLS) regression analysis (Baron & Kenny, 1986). The bilateral hostile-mediator manipulation was positively associated with perceptions of having a common enemy relative to the control group ($\beta = .26$, $t = 2.78$, $p = .006$; see Figure 2). When controlling for perceptions of having a common enemy, the effect of bilateral hostility was reduced to non-significance (from $\beta = -.20$, $t = -2.13$, $p = .04$ to $\beta = -.14$, $t = -1.52$, $p = .13$), and perceptions of a common enemy significantly predicted demands from the counterpart ($\beta = -.24$, $t = -2.73$, $p = .007$). A bootstrap analysis indicated that the 95% bias-corrected confidence interval for the size of the indirect effect of bilateral hostility excluded zero (-22,006.65, -1182.72), suggesting that there is a significant indirect effect of bilateral hostility through the feeling of having a common enemy (MacKinnon et al., 2007).¹⁴

Insert Figure 2

Taken together, these findings demonstrate that mediator hostility increases willingness to reach agreement – by decreasing the amount they are demanding from the other side – primarily because hostility turns mediators into a common enemy that shifts the focus away from interpersonal conflict between the negotiators. Our results also reveal that the feeling of a shared enemy is critical to the hostile mediator effect: only when the hostility was directed at both negotiators did negotiators feel like they shared a common enemy with their counterpart, decreasing the amount in which they demanded compensation from their counterpart. However, when hostility was directed toward just one negotiator but not the other, negotiators were no more willing to compromise (in fact, they were directionally less willing to reach agreement) than those who interacted with a nice mediator.

Another possible explanation of these findings beyond perceiving a common enemy is that seeing the counterpart as the target of hostility may elicit compassion toward that counterpart. To understand the role of compassion toward a harmed other as a driver of conflict reduction, future studies could compare the effects of hostility directed toward only the counterpart against the effects of bilateral hostility. If unilateral hostility toward the counterpart increases participants' willingness to reach agreement to the same extent as bilateral hostility, then compassion toward the counterpart could serve as an additional driver of the hostile mediator effect.

Additionally, all participants in this experiment as well as those in Experiments 1 and 3 played the role of an individual who took action that resulted in conflict between the two parties. We note that in Experiment 2, participants did not play the role of parties at fault, but instead negotiators – who did not have any prior history – discussing terms of a new contract. Although added hostility from the mediator increased willingness to reach agreement in both contexts, additional research is needed to determine whether such hostility leads parties who are clearly at fault to acquiesce to the other side's demands, and to explore whether the same hostility could lead parties *not* at fault – that feel entitled to compensation – to be even more demanding.

4. General Discussion

When might adding negativity to an already hostile situation lead to reconciliation of conflict? Parents of quarreling siblings often find themselves shouting a curious phrase when their efforts at peacemaking fail: “I don't care who started it – both of you go to your rooms!” At first blush, this strategy may sound less effective in defusing sibling tensions as compared to a calmer approach. Yet as anyone with children or siblings knows, parents' stern treatment of both parties can have an unusual effect. Siblings who moments before were in conflict may find themselves more united against their tyrannical parents and might even end up playing nicely together after being banished (Kramer et al. 1999).

Although intuition would suggest that nice and understanding mediators are effective at resolving conflict (Susskind et al. 1999), as our pilot study also finds, our results show that hostile mediators increase negotiators' willingness and propensity to reach agreements by creating a common enemy.

In Experiment 1, participants reported greater willingness to reach agreement with their counterpart in the presence of a hostile, rather than a nice or neutral, mediator. In Experiment 2, negotiators were not only more willing but also better able to reach agreement after interacting with a hostile mediator than a nice one. In Experiments 3 and 4, perceptions of a common enemy mediated the relationship between mediator hostility and negotiators' willingness and ability to reach agreement. To further explore the possibility that hostile mediators unite negotiators by serving as common enemies, Experiment 5 manipulated whether mediators were bilaterally hostile toward both negotiators or unilaterally hostile toward just one counterpart. We found evidence that bilateral hostility made negotiators less demanding whereas unilateral hostility did not influence the amount that negotiators demanded. Across these studies, we rule out desire to avoid interacting with the mediator, fear of the mediator making decisions on behalf of the negotiators, and expectancy violations as explanations for our findings.

4.1. Theoretical and Practical Implications

Although research has demonstrated that mediators' tactical strategies (e.g., timing and pacing) influence how two parties resolve conflict (Carnevale and Pruitt 1992, McLaughlin et al. 1991), our research shows that mediators' display of emotions – particularly negative ones in the form of hostility – impacts negotiators' perceptions of each other and their ability to reach agreement. Prior research has shown that displays of anger in negotiation at best help the angered party claim value while leaving the other party at a disadvantage and at worst provoke negotiators to retaliate (Allred et al. 1997, Côté 2005, Friedman et al. 2004, Pillutla and Murnighan 1996, Van Kleef and Côté 2007). However, we show that displays of hostility can sometimes have positive effects, particularly in contexts where a third party's hostile behavior influences negotiators to view each other more positively. Whereas hostility emanating from members of either negotiating party likely worsens tensions and increases the likelihood of stalemate, hostility emanating from the third party can have the opposite effect – similar to the siblings who see the good in each other after being scolded by their parents (Kramer et al. 1999, Recchia and Howe 2009).

Building on past research that shared negative experiences decreases conflicts between and within groups (Bastian et al. 2014, Sherif 1958, Sherif et al., 1961, Wildschut et al. 2014), we found evidence that the mere experience of being the joint target of directed hostility is enough to increase perceptions of having a common enemy, reducing the social distance between opposing parties and increasing negotiators' motivations and abilities to cooperate.

We also assessed several alternative explanations for our findings. In mediational analyses in Experiment 3, perceptions of having a common enemy and perceived social distance served as significant mediators, whereas counterpart warmth did not. These results held after controlling for the degree to which participants felt prepared for the mediators' hostility, suggesting that expectancy violation was not a primary driver of our findings. Furthermore, experiments in which participants knew beforehand that they would have only one interaction with the mediator and that mediators' decisions were not binding demonstrate that desire to avoid interacting with the mediator in the future or fear of mediator-imposed agreements are unlikely driving these results.

More broadly, these findings bridge research on conflict management and social dilemmas. One of the challenges in social dilemmas is that individuals and groups defect rather than cooperate, enhancing social good at a cost to themselves (Hardin 1968). One solution to promote greater cooperation identified in prior work is to create opportunities to punish those who defect with monetary sanctions (Fehr and Gächter, 2000). Our findings suggest that in addition to monetary punishment, another approach to improving cooperation entails introducing social punishment in the form of hostility. That is, whereas monetary punishment can be costly to both the punisher and the recipient of the punishment, social punishment may serve as an alternative that can, in some cases, turn potential defectors into cooperators. From a more practical perspective, we note that these findings do not imply that effective mediators should always be hostile, particularly as mediators seek to build reputations as understanding individuals in order to attract future negotiators. By studying non-normative behaviors, our findings demonstrate that mediators' expressions of emotions – whether nice or hostile – shape the perception of social distance between counterparts, influencing negotiators' motivation to reach agreement.

4.2. Limitations and Directions for Future Research

One limitation of our experiments is that our negotiators and mediators did not meet in face-to-face interactions. Because mediations in Experiments 2 and 4 were over virtual chat rooms, additional research should have mediators interact with negotiators in person to understand the impact of mediator hostility on negotiators' willingness and propensity to reach agreements. Beyond the medium of communication, additional research is needed to understand the different manifestations of hostility. In our studies, we operationalized and measured hostility based on the extent to which individuals viewed the mediator as mean. "Meanness" refers to general unkindness and may be derived from a combination of hostile behaviors, including directed anger, rudeness, and spitefulness. Future research is needed to disentangle the relative contributions of these aspects of hostility on negotiators' perceptions of having a common enemy and desire to resolve conflict.

Future research can also investigate the influence of hostility on different types and domains of conflict. In our studies, added hostility shifted perceptions in situations where participants were in conflict

over resources and where there were positive zones of possible agreement. However, added hostility may not be helpful in situations where the zone of possible agreement is small, difficult to uncover, or negative. Additionally, hostility from a mediator may be detrimental for relational conflicts that are more personal as opposed to task or procedural conflicts, particularly if the mediator is hostile toward both parties for personal missteps or character flaws that originally ignited the conflict (De Dreu and Weingart 2003, Jehn, Northcraft and Neale 1999). Relatedly, because participants in our studies experience moderate levels of conflict, more research is needed to understand whether a single interaction with a hostile mediator is enough to help disputants resolve more intense – and longer standing – conflicts.

Across our studies, hostility toward both counterparts may have seemed incommensurate to the degree of conflict: mediators were likely perceived to be harsher than the situation required. As a result, participants could have become more empathetic and compassionate toward their counterparts after witnessing them receive the brunt of undeserved hostility. More research is needed to understand the possible role of empathy and compassion toward the counterpart, and the extent to which directed hostility that feels warranted could mitigate or reverse the impact of hostility on negotiators' willingness and ability to reach agreement. Finally, different formats of mediated negotiation may alter the impact of negative and positive emotions from the mediator. For example, in formats where one mediator both mediates and arbitrates decisions (“med-arb”), hostile mediators might encourage more negotiators to reach agreements on their own. In contexts where the mediator and arbitrators are different individuals, the mutual expectation of interacting with a hostile arbitrator might have different effects than first interacting with a hostile mediator and then with a presumably less-hostile arbitrator.

4.3. Conclusions

Our research contributes to existing work focusing on the critical role of emotions in conflict resolution. These findings provide a first analysis of how displays of positive and negative emotions from third parties influence negotiators' perceptions of each other and their ability to reach agreements. In contrast to the intuitions of both mediation “how to” manuals and our own participants, hostile mediators can increase the likelihood that parties in conflict find solutions to their disagreements. By studying mediator behaviors counter to what is typically recommended, we show that hostile mediators can positively influence negotiators' motivation and ability to resolve conflict.

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Tables and Figures

Table 1. Perceptions of mediator and counterpart, and agreements reached by condition (Experiment 2)

	Mediator hostility	Social distance to counterpart	Agreement	Joint net value of agreement (in millions \$)	Equity of agreement
Nice	1.65 (.37)	3.84 (.90)	59% (22/37)	\$2.17 (1.89)	34% (39.39)
Hostile	2.74 (.41)	4.32 (1.24)	85% (35/41)	\$2.71 (1.45)	22% (36.50)

Standard deviations are reported in parentheses.

Table 2. Mediation analysis (Experiment 2)

Variable	Social Distance		Reached agreement	
	(1)	(2)	(3)	
	X → M	X → Y	X, M → Y	
Hostile mediator condition	.22 ⁺	1.38*	1.26*	
Social Distance			.70*	
Adjusted R ²	.04	.08	.16	
95% bias-corrected CI			[-.003, 1.07]	

Note. CI = unstandardized confidence interval for the indirect effect. The table reports standardized coefficients for each regression. Adjusted R² for logistic regressions are based on Cox and Snell calculations.

⁺*p* < .10, **p* < .05, ***p* < .01, ****p* < .001

Table 3. Mediation analysis (Experiment 3)

Variable	Common enemy (M ₁)	Social Distance to Counterpart (M ₂)	Counterpart's Warmth (M ₃)	Willingness to reach agreement	Willingness to reach agreement	Willingness to reach agreement	Willingness to reach agreement	Willingness to reach agreement
	X → M ₁	X → M ₂	X → M ₃	X → Y	X, M ₁ → Y	X, M ₂ → Y	X, M ₃ → Y	X, M _{1,2,3} → Y
Hostile condition	.48***	.27*	.19 ⁺	.28**	.04	.14	.18 ⁺	.05
Common enemy (M ₁)					.49***			.20 ⁺
Social distance (M ₂)						.50***		.26*
Counterpart's warmth (M ₃)							.52***	.29**
Adjusted R ²	.23	.06	.04	.07	.25	.29	.32	.39
95% bias-corrected CI of common enemy					[.13, .38]			[.02, .22]
95% bias-corrected CI of social distance to counterpart						[.04, .27]		[.01, .18]
95% bias-corrected CI of counterpart warmth							[-.001, .22]	[0.001, .15]

Note. CI = standardized confidence interval for the indirect effect. The table reports standardized coefficients for each regression.

⁺p < .10, *p < .05, **p < .01, ***p < .001

Table 4. Payoffs for two parties in Experiment 4**Burger Stop Payoff Chart**

Last week's order	Tomatoes, lettuce, onions	Burger meat	Delivery
No refund (0)	Current order (0)	94% lean beef (0)	Every 7 days (0)
25% refund (600)	2 varieties (400)	95% lean beef (1,000)	Every 6 days (600)
50% refund (1,200)	3 varieties (800)	96% lean beef (2,000)	Every 5 days (1,200)
75% refund (1,800)	4 varieties (1,200)	97% lean beef (3,000)	Every 4 days (1,800)
100% refund (2,400)	5 varieties (1,600)	98% lean beef (4,000)	Every 3 days (2,400)

Local Foods Payoff Chart

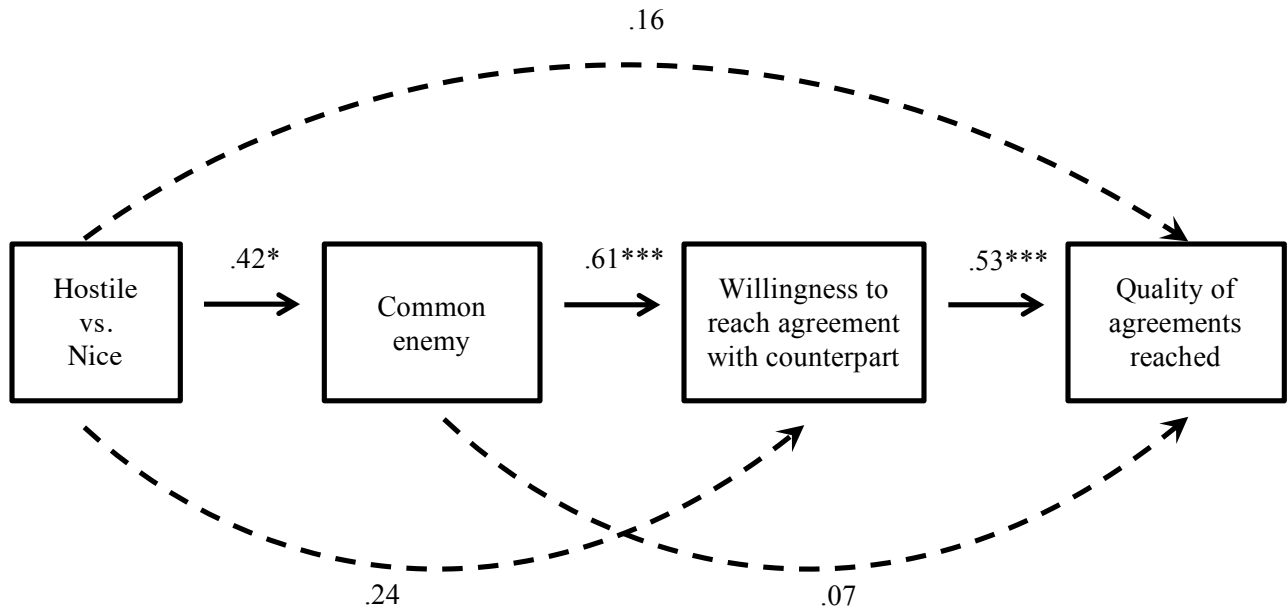
Last week's order	Tomatoes, lettuce, onions	Burger meat	Delivery
No refund (2,400)	Current order (4,000)	94% lean beef (1,600)	Every 7 days (2,400)
25% refund (1,800)	2 varieties (3,000)	95% lean beef (1,200)	Every 6 days (1,800)
50% refund (1,200)	3 varieties (2,000)	96% lean beef (800)	Every 5 days (1,200)
75% refund (600)	4 varieties (1,000)	97% lean beef (400)	Every 4 days (600)
100% refund (0)	5 varieties (0)	98% lean beef (0)	Every 3 days (0)

Table 5. Perceptions of mediator and counterpart, and agreements reached by condition**(Experiment 4)**

	Mediator hostility	Common enemy	Counterpart's warmth	Willingness to reach agreement	Total points	Equity of agreement
Nice	1.56 (.76)	3.51 (1.03)	4.14 (1.27)	4.88 (.82)	4,268.57 (3223.80)	64% (41.05)
Hostile	5.54 (1.23)	3.92 (1.04)	4.55 (1.29)	4.46 (.97)	5,921.21 (3,902.33)	49% (38.82)

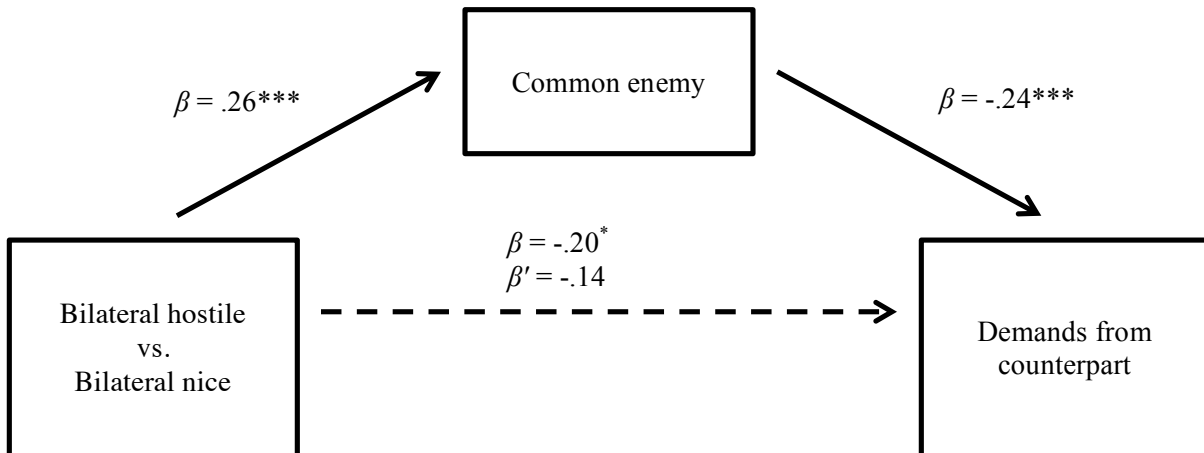
Standard deviations are reported in parentheses.

Figure 1. Mediation analysis on agreements reached with counterpart (Experiment 4)



$*p < .05$, $**p < .01$, $***p < .001$

Figure 2. Mediation analysis on demands from counterpart (Experiment 5)



Footnotes

¹ This amount was considered a standard market rate at the time the study was conducted. Past research has shown that the Mechanical Turk service provides reliable data for research purposes (Buhrmester et al. 2011).

² The chosen sample size provided 52% power to detect a medium-sized and 89% power to detect a large-sized difference between the hostile- and nice-mediator conditions.

³ For these and all following results, we collapsed our findings across the gender of the mediator, as we did not find any main effects of gender or an interaction between the mediator's gender and our manipulation on the following dependent measures, $F_s > .74$, $ps > .48$.

⁴ Based on odds ratio estimates assuming that 60% of dyads would reach agreement in the nice-mediator condition, the chosen sample size provided 40% power to detect a medium-sized and 73% power to detect a large-sized difference between the hostile- and nice-mediator conditions.

⁵ Although this simulation is not strictly used for conflict resolution, it does allow for computation regarding the overall quality of agreements. Based on past experiences in negotiation courses, people do experience some conflict when negotiating to get to a deal.

⁶ Negotiators did not use contingency contracts in their agreements.

⁷ The chosen sample size provided 64% power to detect a medium-sized and 96% power to detect a large-sized difference between the hostile- and nice-mediator conditions.

⁸ To ensure that participants in this dispute felt conflict toward their counterparts, we recruited a separate group of one hundred eighty-nine individuals in the lab ($M_{age} = 22.11$, $SD = 13.93$) to read one of two roles and rate "the extent to which you feel upset toward your counterpart" (1= not at all; 7 = extremely). On average, participants felt moderately upset at their counterparts ($M = 4.58$, $SD = 1.17$), significantly greater than the midpoint value of 4, $t(188) = 6.79$, $p < .001$.

⁹ We excluded counterpart's perceived competence from mediation tests as mediator hostility did not influence participants' willingness to reach agreement with their counterpart.

¹⁰ The chosen sample size provided 82% power to detect a medium-sized and 99.6% power to detect a large-sized difference between the hostile- and nice-mediator conditions.

¹¹ Given that we measured willingness to reach agreement prior to perceptions of having a common enemy, we conducted the same mediation reversing the order of these two mediators in the path analysis. When the first mediator was willingness to reach agreement and the second mediator was perceptions of a common enemy, the indirect effect included zero (-.01, .07), suggesting that the path analysis based on the order in which items were collected was not an appropriate fit for the data.

¹² The chosen sample size provided 66% to detect a medium-sized and 97% power to detect a large-sized difference between the hostile- and nice-mediator conditions.

¹³ As a robustness check that our manipulation had the intended effect across other similar measures, we conducted the following analyses: An ANOVA on the mediator's warmth revealed the predicted main effect for mediator style, $F(2, 136) = 89.67, p < .001, \eta_p^2 = .57$. Post-hoc tests using LSD corrections indicated that participants in the nice-mediator condition rated the mediator as warmer ($M = 4.82, SD = 1.46$) than did participants in both the bilateral hostile-mediator ($M = 1.71, SD = .82, p < .001$) and the unilateral hostile-mediator conditions ($M = 2.01, SD = 1.31, p < .001$). The difference between hostility directed bilaterally and unilaterally was not significant for perceptions of the mediator's warmth ($p = .23$). Additionally, a similar ANOVA on the mediator's competence revealed differences in the three conditions, $F(2, 136) = 6.31, p = .002, \eta_p^2 = .09$. Post-hoc tests using LSD corrections indicated that participants in the nice-mediator condition rated the mediator as more competent ($M = 4.54, SD = 1.52$) than did participants in the bilateral hostile-mediator condition ($M = 3.62, SD = .92, p < .001$) and was marginally significant relative to the unilateral hostile-mediator condition ($M = 4.06, SD = 1.23, p = .06$). The difference between hostility directed bilaterally and unilaterally was marginally significant for perceptions of the mediator's competence ($p = .07$). Lastly, an ANOVA on overall meanness ratings revealed the predicted main effect for mediator style, $F(2, 136) = 97.82, p < .001, \eta_p^2 = .59$. Post-hoc tests indicated that participants in the nice-mediator condition rated the mediator as less mean ($M = 1.83, SD = 1.62$) than did participants in both the bilateral hostile-mediator ($M = 5.58, SD = 1.44, p < .001$) and the unilateral hostile-mediator conditions ($M = 5.89, SD = 1.62, p < .001$). The difference between hostility directed bilaterally and unilaterally was not significant for perceptions of overall meanness of the mediator ($p = .33$).

¹⁴ We did not find evidence of statistical mediation for the unilateral hostility condition, as unilateral hostility did not have a significant impact on negotiators' demands from their counterpart ($\beta = .15, t = 1.61, p = .11$). When controlling for perceptions of having a common enemy, the effect of unilateral hostility remained non-significant ($\beta = .11, t = 1.19, p = .24$). The 95% bias-corrected confidence interval for the size of the indirect effect of unilateral hostility included zero (-441.80, 17,145.52), suggesting that there is insufficient evidence that reduced feelings of having a common enemy increased demands in the unilateral hostility condition (MacKinnon et al., 2007).