Tactical Anger in Negotiation: The Expresser's Perspective

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Abstract

Presenting programmed angry messages to a negotiator has increased concession rates in a series of recent experiments. But observing responses to a computer or confederate counterpart cannot yield insight into the perceptions, reactions, and negotiation outcomes experienced by those who actually deploy anger as a tactic. We report five studies examining the anger expression decision using a range of different methods. In the fully interactive two-person integrative negotiation in Study 1, expressed anger generally degraded trust while damaging implementation of deals. That ultimately diminished value actually claimed by anger expressers. In the discrete choice experiment of Study 2, sending angry messages proved costly for expressers, who registered very high levels of measured disutility from using this tactic. In Study 3, survey respondents reported widespread unwillingness to misrepresent anger during negotiation. Recalling a past negotiation, anger correlated negatively with experienced success, indicating that disutility from expressing anger generalizes widely across different contexts. Study 4 revealed that negotiators generally consider the tactic to be unethical. More than just specific beliefs about the lack of efficacy, Study 5 revealed that the source of tactical disutility lies in generalized discomfort with the misrepresentation of anger. Implications for research, practice, and training are considered.

Keywords: negotiation, emotion, anger expression

Tactical Anger in Negotiation: The Expresser's Perspective

Negotiation is a social exchange process in which people attempt to form agreements about their future actions or to resolve disputes between them. Researchers across the social sciences seek to understand factors contributing to successful results in negotiation. Studies have examined the efficacy of anger expression in claiming value from counterparts. Most of the research focus is on emotions conveyed rather than initially felt. Communicating anger about offers received can generate more rapid concessions from a human counterpart even if that emotion has not actually been experienced (Adam & Brett, 2015; Hunsaker, 2017).

We examine tactical expression of anger from the expresser's perspective. We study people's willingness to engage in this tactic, their subjective valuation of doing so, as well as their overall attitudes towards it. Because research has focused so much on responses to someone expressing anger, the expressers' point of view has largely been assumed rather than studied directly (Sharma et al., 2020). We also consider how different incentive schemes commonly deployed (research credit, in-class participation, and pay for performance) influence reaction to the tactic.

Literature Review

With experimental studies using computer program confederates that convey anger, van Kleef, De Dreu, and Manstead (2004a) demonstrated that targets of anger expression conceded more than those exposed either to emotion free or positive expressions. Targets concede to angry counterparts because they perceive them as having reached their limit (Van Dijk et al., 2008; Van Kleef et al., 2004b). Replications and extensions identified important qualifications for this effect. Anger expression does not yield concessions when the recipient has a strong alternative to

negotiated agreement (Sinaceur & Tiedens, 2006; Van Kleef et al., 2004a). Nor do they elicit concessions unless they are believed to be sincere (Tng & Au, 2014).

Writers for mass media outlets took notice of these striking findings, often interpreting them in a highly prescriptive manner to stress the benefits of anger expression. Hutson (2015), writing for the New York Times, wrote: "used judiciously, it [expressing anger] can get us better deals, galvanize coalitions and improve all our lives". Such provocative generalizations require far more study, particularly from the expresser's point of view. This need is evident because research outside of the negotiation literature would suggest significant disutility associated with the tactic. Anger is an unpleasant and aversive emotion (Smith & Ellsworth, 1985); experiencing it predicts experience of other negative emotions, including guilt, anxiety, distress, along with even greater anger (Martin & Watson, 1997). People who reported their sense of anger was inappropriately high for the situational context also felt anxious and subsequently engaged in less aggressive behavior (Berkowitz et al., 1969). Expressing anger is associated with negative consequences encompassing violence, damaged relationships, and property destruction (Deffenbacher, Oetting, Lynch, et al., 1996; Deffenbacher, Oetting, Thwaites, et al., 1996). This work implies some of the scope of potential costs that may result from unnecessary anger expression in negotiation.

Existing studies provide limited insights about the negotiator expressing anger. From surveying methodological choices in a systematic review of this research (Adam & Brett, 2015; 69 journal articles and 142 studies), it appears that researchers have largely focused on the target, making methodological choices consistent with understanding how they respond. These methodological choices include use of confederates and scenario designs, low or non-monetary stakes, and absence of downstream measurement which focus measurement on how targets of

anger behave. This careful, systematic, and rigorous program of studies have consistently replicated findings that show targets of anger expression concede on issues when there is both a cooperative and competitive element to the bargaining task (Adam & Brett, 2015; Sharma et al., 2020). But fully understanding a social exchange process also requires insight into the perspective of the expresser who must weigh both the benefits and the costs associated with the tactic. In the sections below, we discuss the impact of these design choices in detail.

Use of Confederates and Scenario Designs

Designs that examine the effect of angry messaging focus measurement on the target of anger. Of studies reviewed by Adam and Brett (2015), 85% relied on either human (e.g., Andrade & Ho, 2009; Heerdink, van Kleef, Homan, & Fischer, 2013) or computer confederates (e.g., Pietroni, van Kleef, De Dreu, & Pagliaro, 2008; Sinaceur, Van Kleef, Neale, Adam, & Haag, 2011). Others use the scenario method (e.g., Adam & Shirako, 2013; Harinck & Van Kleef, 2012). These methods provide insight on reactions to anger, but little information about costs that expressers contemplate when considering the tactic.

In the studies that did not use such designs (22 studies), there were few attempts to measure behavior of the expresser. Studies measured observer reports of anger (Geddes & Stickney, 2011), or examined archival records of a dispute resolution process in which anger could be observed (Friedman et al., 2004), or described the detrimental effects of expressing anger (Gibson et al., 2009). We hasten to stress that this observation should not be considered a failing. Understanding reactions to these expressions represents a logical first step in a programmatic sequence of studies. The precision of measurement these types of research designs enabled has yielded great insight into essential aspects of the negotiation process.

The pattern of methodological choices to date implies an opportunity to begin exploring how negotiators think about expressing anger and the deliberate decision to do so. The systemic choice to use confederate and scenario designs also imply focus on a particular form of anger. When confederates or scenarios convey angry messaging, the emotion is exogenously imposed on the process. Anger expression in such studies amounts to emotional misrepresentation, or "the deliberate expression of an emotion that is different from the one genuinely felt by the negotiator" (Campagna et al., 2016, p. 605). This is distinct from anger that originates from the perception of a violation as experienced or expressed in mediated disputes (Friedman et al., 2004) or in the workplace (O'Neill et al., 2009). Past research has investigated misrepresented anger, and it is this form of anger we explore from the expresser's perspective.

Low or Non-Monetary Stakes

The use of low or non-monetary stakes as compensation means we know little about how expressers benefit from the tactic with significant stakes at risk. Only six percent of studies Adam and Brett (2015) reviewed featured payoffs directly linked to the outcome of the bargaining process. In many studies demonstrating concession making, compensation is either guaranteed or only weakly related to negotiation outcomes through for example granting of course credit or experimental points that convert to very low expected value lottery tickets (e.g., Adam, Shirako, & Maddux, 2010; Hareli, David, Akron, & Hess, 2013; Lelieveld, Van Dijk, Van Beest, Steinel, & Van Kleef, 2011; Sinaceur, Van Kleef, Neale, Adam, & Haag, 2011; Van Doorn, Van Kleef, & Van der Pligt, 2015; Van Kleef & Côté, 2007; van Kleef & De Dreu, 2010; Wang, Northcraft, & van Kleef, 2012). When negotiation outcomes are weakly related to realized value and costs of concessions are low, it becomes difficult to estimate the true benefits of misrepresenting anger. This is because targets of anger confront a decision about conceding

experimental points of purely symbolic value in exchange for limiting their exposure to an unpleasant emotion. But if conceding translates into a loss of enduring material value, as it typically would in the field, parties might be more willing to endure the anger. For example, in negotiations over corporate mergers, anger focuses parties toward an adversarial stance that is not conducive to conceding for either side (Daly, 1991). Thus, it remains to be seen whether expressers realize economic benefit from expressing anger that offsets potential intrapsychic costs of engaging in the tactic.

Modeling and Measuring Downstream Effects

Negotiated agreements represent a commitment to take action at some point in the future. In a simple marketplace transaction, those commitments may be fulfilled quickly, so parties can monitor compliance with ease. Merger agreements, employment contracts, and project work differ. Misrepresenting anger may have negative consequences for implementation of the terms of negotiated agreement. With limited opportunity to monitor behavior, negotiators have wider latitude in how they fulfill agreements. Encountering unpleasant counterpart behavior may be sufficient for some negotiators to shirk from exerting much effort to implement the deal. In organizational settings, people often retaliate against those who anger them (Bies & Tripp, 2012). Some negotiation studies have measured implementation as a dependent variable. Perceptions of relational conflict resulted in diminished implementation effort (Hart & Schweitzer, 2020). Angry messages increased retaliatory behavior (Wang et al., 2012) and reduced trust (Campagna et al., 2016). Anger expressions appear to raise the risk of reputational damage as well as targets reducing implementation effort. But relatively few papers have explicitly measured implementation behavior. Among those reviewed by Adam and Brett (2015), only 20% model any form of post-bargaining interaction as most ceased measurement after a set

number of rounds or when any agreement was reached (e.g., Filipowicz, Barsade, & Melwani, 2011; Van Kleef et al., 2004a). The present studies aim to examine more fully the impact of anger misrepresentation on downstream consequences.

Overview of Studies

Building on the existing literature in order to examine the tactic from a different perspective, we conducted five studies looking at how expressers execute, evaluate, and benefit from anger misrepresentation. By using a variety of methods, we hope to gain additional insight into other aspects of that process. Study 1 tested for willingness to express anger in a dyadic negotiation design with reciprocal interdependence in which the behavior output from one party forms the stimulus input to the other party and vice versa (J. D. Thompson, 1967). The task also entails strategic risk, in which economic outcomes are not known with certainty at the point of agreement. This should reveal willingness to deploy the emotional misrepresentation tactic and its impact on value claimed in securing favorable outcomes. We then explore intrapsychic, interpersonal, and instrumental, sources of disutility associated with the tactic. Study 2 utilized a discrete choice experiment (DCE) methodology to examine instrumental sources of disutility, by calculating the value negotiators impute to receiving angry messages and to expressing them. Study 3 examined interpersonal sources of disutility by examining recalled instances of anger misrepresentation. Study 4 examined the ethical perception of the tactic, revealing both intrapsychic and interpersonal concerns. Study 5 compares these sources of disutility directly.

Study 1

In Study 1, we examine willingness to express anger and downstream consequences from using the tactic. We deployed a dyadic simulation featuring an employment negotiation with integrative potential, where outcomes translate directly to cash payments. Both sides of the

negotiation were represented by participants, which models reciprocal interdependence. Anger misrepresentation was incentivized through monetary reward. This should allow observation of how willing people are to deploy the tactic in an interpersonal context. To model downstream effects, the target of anger was required to make a costly private decision about implementation. This meant economic outcomes could not be known at the point of agreement.

We set up competing hypotheses about the effect of misrepresented anger. Consistent with results suggesting anger expression results in value claiming if the situation requires both cooperation and competition (Adam & Brett, 2015), hypothesis 1a holds that negotiators instructed to express anger would claim more value represented in the negotiated agreement than those instructed to express no emotion to their counterpart. Consistent with the observation that anger expression does not yield tangible benefit when real monetary stakes are deployed in a two-sided negotiation (Campagna et al., 2016, 2019), hypothesis 1b is that negotiators instructed to express anger will not claim more value than those instructed to express no emotion to their counterpart. Anger may also hinder the formation of trust, which is critical to investing effort in the implementation phase (Campagna et al., 2016, 2019; Mislin et al., 2011). Thus, hypothesis 2 was that expressing anger will diminish effort expended in implementing the contract, an effect mediated by trust.

Method

Participants

One hundred fifty-six participants (M_{age} =25.90, SD=10.34, 47% female) from a midsized private Midwestern university and the local community participated in return for a five dollar participation fee plus the possibility of earning more from the study. One dyad was

excluded after software failure prevented negotiating. Eleven dyads were excluded when participants proved unable to navigate the computer interface well enough to finish the task.

Procedure

Following assignment to a workstation, participants completed self-report measures. Participants were then randomly assigned to a counterpart and role. Measures, instructions, and tutorials were provided on a computer interface. At random, buyers received either an anger (N=76) or neutral emotion expression instruction $(N=56)^1$. The first phase of the negotiation incorporated a payoff chart typical of most integrative negotiation studies (see Appendix A). The buyer was a logistics firm, requiring a software package from an IT developer. There were five issues, with four set up for integrative potential and one distributive issue. Participants were informed that every 1,000 points they earned equated to one US dollar paid out in cash. The maximum possible payout for this phase was \$11.50. A quiz about the instructions followed; any participant who answered inaccurately received further clarifying instruction. Participants could make offers and/or send instant messages for 10 minutes. If an impasse was reached, participants received 1,000 points, the value of their best alternative to negotiated agreement (BATNA). A post negotiation questionnaire measuring trust was then administered. Those impassing after the first phase were paid and dismissed after completing these questionnaires.

The second phase was introduced as a negotiation over the implementation of the software package agreed to in the first phase. The task was adapted from contracting experiments (Miller & Whitford, 2002; Whitford, Bottom, & Miller, 2013). The software package would be worth 30,000 points if the project generated a high quality product but 10,000 points otherwise.

¹ Cell sizes were unbalanced due to random assignment and due to dyads being removed for non-comprehension of instructions; we interpret these losses in data orthogonal to the assignment of condition (i.e., missing at random). We did not adjust for unbalanced cell sizes since unbalanced cell sizes represent issues when calculating marginal means with two or more factors (Rawlings et al., 1998); our analyses only involve anger vs. neutral tone conditions.

The probability of a high quality product depended on the seller's actions. They could invest between 5,000 and 8,500 points, which translated to 50% and 80% chance of success, respectively. They could choose to invest between these extremes at 100 point increments, with the chance of success scaling linearly. The parties negotiated over contract terms comprising guaranteed payments and bonus pay awarded on project success. They had eight minutes to negotiate. As with the first phase, impasse resulted in a BATNA of 1,000 points. If an agreement was reached, the seller recorded a private costly effort choice and a random number generator determined project success at the odds set by the seller's choice. Both parties were informed of success or failure as well as total points earned. Buyers never learned seller effort choice. Participants were debriefed then paid in cash before they left. All interaction was conducted via instant messaging on computer terminals.

Emotion Expression Manipulation

Buyers were instructed to express either angry or neutral emotions in the first phase.

Those in the anger condition were briefed that their company had found the expression of anger to be a successful tactic so they were urged to send angry sentences adapted from Van Kleef, De Dreu, and Manstead (2004b). Those in the neutral condition were given instructions stating the company's belief that a neutral tone was more likely to achieve superior outcomes in negotiations. Buyers were told that they could earn up to 2,500 points for successfully conveying the assigned emotion. Immediately after the first phase, the seller rated buyer emotion on a 9-point scale. Sellers assigned to buyers in the anger condition were asked about the buyer's level of anger, whereas sellers assigned to buyers in the neutral condition were asked about the buyer's level of neutrality. A rating of 1-3 earned them no points, a rating of 4-6 yielded 1,000 points and a rating of 7-9 paid out 2,500 points. The computer retained only the value of points awarded to

the buyer. Sellers provided a separate and more granular rating of buyer anger in the post-test measures, used to test hypotheses.

Measures

Post-test Measures

After the first phase, participants were asked for their perception of counterpart's anger on a 9-point scale (0=did not feel in the slightest, 8=a great deal). Participants also rated trust in their counterpart, using Schoorman and Ballinger's (2006, cited in Schoorman, Mayer, & Davis, 2007) measure of trust (α =.67) along with counterpart's integrity (α =.78) and benevolence (α =.86), using items adapted from Mayer and Davis (1999).

External Ratings of Negotiator Emotion

Two coders, blind to hypotheses and manipulations rated the text for anger expressed after the first phase for both buyers and sellers separately (1=not at all, 7=extremely). See Appendix B for a comprehensive list of self-report measures and coding prompts used in assessing transcripts along with the list of all measures obtained in this and other studies.

Results

Table 1 reports descriptive statistics and correlations. Two dyads reached an impasse in the first phase. Both involved a buyer in the angry expression condition.

Manipulation Check

External coders and seller ratings of anger provided a manipulation check². The two coders ratings were consistent for the first phase [$ICC_{(2, k)}$ =.87]. Given the level of interrater reliability, we averaged these. Coders rated buyers assigned to the anger condition as being

² We also attempted to manipulate the seller's emotion to provide a favorable condition for angry expressions to facilitate value claiming. While the buyers were receiving instructions on anger or neutral expression, sellers were shown used video clips that have successfully induced calmness or anxiety in prior research. These clips failed to create group differences in anxiety, so we collapsed across those conditions in the analysis presented.

angrier (M_{anger} =3.35, SD=2.12) than those in the neutral condition ($M_{neutral}$ =1.16, SD=2.19, t=5.91, p=10⁻⁶) during the first phase. Consistent with this pattern, seller ratings of buyer anger were higher in the anger (M_{anger} =3.50, SD=2.59) than the neutral condition ($M_{neutral}$ =1.14, SD=2.19, t=4.00, p=.0002). As Figure 1 indicates, the modal participant in the neutral condition earned the maximal incentive while nearly all earned at least some incentive (25 of 28; Panel B). Many incentivized to express anger failed to earn any incentive payment (11 of 37; Panel A). The anger manipulation yielded a relatively flat distribution of anger ratings as perceived by both the counterpart and external coders (Panels C and E). This was not the case in the neutral condition (Panels D and F).

Tactical Implications

Anger expression did not yield significant concessions from the counterpart. We regressed buyer's points from the first phase on the emotion condition indicator³ but it was not significant (B=-37.19, p=.72). Because of the heterogeneity observed in the level of anger produced by buyers in the anger condition, we conducted additional analyses, using the seller's perception of buyer's anger as the independent variable (B=-37.19, p=.72), as well as a separate regression with the coder's rating of buyer anger as the independent variable (B=-23.32, p=.87). Neither variable predicted outcomes. This supports hypothesis 1b, but contradicts hypothesis 1a.

Strategic Implications

Hypothesis 2 stated that expressing anger would diminish effort expended in implementing the contract, mediated by trust. We used the Monte-Carlo method for testing

³ Although the data are nested within dyads, dyadic data analyses are not appropriate in this case. This is because the dependent variables do not demonstrate consequential noninterdependence (Kenny et al., 1998), defined as an intraclass correlation of |.45| or greater. The intraclass correlation of the dependent variable was ICC(1) = -.31. In addition, such analyses are not applicable to H2 since the buyer has no outcome comparable to the seller (i.e., only the seller can make a private costly effort choice).

mediation (Preacher & Selig, 2012; Selig & Preacher, 2008). In step one, we regressed buyer's anger condition on seller's perception of buyer's benevolence (*a* path=-.39, *SE*=.20, *p*=.06). In step two, we regressed seller's costly effort on seller's perception of buyer's benevolence (*b* path=315.40, *SE*=197.00, *p*=.12), controlling for buyer's anger condition. In step three, a Monte-Carlo simulation with 20,000 resamples was used to generate the confidence interval for the indirect effect. The confidence interval included zero at the 95% confidence level (*indirect effect*=-120.94, *95% CI*=-380.20~34.82). The result is not consistent with hypothesis 2. However, we also tested the hypotheses in an alternate manner using the seller's perception of buyer's anger and the external coder's ratings of buyer's anger as the independent variable. These analyses were needed because instructions to express anger resulted in such a highly variable response. The effect of anger expression on trust and costly effort should be sensitive to the level of anger expressed.

In analyses with the seller's perception of buyer's anger as the independent variable, the path from anger perception to benevolence was significant (a path=-.13, SE=.03, p=.0005), as was the path from benevolence to costly effort (b path=430.98, SE=211.18, p=.05), controlling for seller's perception of buyer's anger. The indirect effect was significant, with 95% confidence level excluding zero (indirect effect=-55.71, 95% CI=-128.50~-1.86). In analyses with the external coding of buyer's anger as the independent variable, the path from anger rating to benevolence was significant (a path=-.19, SE=.05, p=.0003), as was the path from benevolence to costly effort (b path=504.84, SE=225.08, p=.03), controlling for seller's perception of buyer's anger. The indirect effect was significant, with 95% confidence level excluding zero (indirect effect=-94.59, 95% CI=-207.90~-10.48). Using the granular measure of anger, sellers who perceived greater levels of anger rated the buyer as less benevolent, then exerted less costly

effort, supporting hypothesis 2. Other measures of trust did not produce the reliable pattern observed with benevolence.

Discussion

A large percentage of buyers passed up the opportunity to earn incentive payments, revealing reluctance to express anger as a tactic. Those instructed to remain emotionally neutral nearly uniformly earned incentive payments for doing so. Buyers who passed up incentives may have been anticipating the null effect of anger on concessions or perhaps they anticipated a lower quality of interaction, which constitutes a source of value in its own right (Curhan et al., 2006). The targets of anger made no more concessions than others, but the resulting loss of trust curtailed effort targets expended implementing the deal. That pattern is consistent with observations by Campagna et al. (2016). A utility maximizing buyer who values quality of interaction would forego instructions and the incentives to avoid destroying this source of value. In Study 2, we aimed to analyze this observed disutility, by estimating the value of misrepresenting anger in messages.

Study 2

Our aim in Study 2 was to measure the disutility associated with anger expression. Study 1 indicated some degree of aversion to falsely expressing anger since many passed up an opportunity to earn additional incentives. To observe attributes of the utility function when negotiators contemplate the tactic, we designed a DCE that estimates how participants in a simulated negotiation would trade off different facets of the negotiating experience.

A DCE assumes "any good or service can be described by its characteristics (or attributes) and, secondly, the extent to which an individual values a good or service depends upon the nature and levels of these characteristics" (Ryan et al., 2001, p. i55). For example, a

consumer can evaluate a car via attributes such as price (\$20,000, \$30,000, \$40,000), gas mileage (e.g., 20 mpg, 30 mpg, 40 mpg), and transmission type (e.g., manual, automatic). In a typical DCE, participants are presented with multiple hypothetical products then indicate their preference for one over another (e.g., Car A: \$30,000, 20 mpg, automatic transmission vs. Car B: \$40,000, 30 mpg, manual transmission). With a factorial design, experimenters can estimate the utility of each attribute level (Louviere, 1988; Street & Burgess, 2007). Crucially, this estimation depends only on the participant's valuations. Such paradigms have been used to estimate utility functions for a negotiation simulation that predicted negotiation outcomes (Greenhalgh et al., 1985). Prior research has also indicated the possibility of exploring emotional and social concepts with DCEs, such as the effects of medication on social interactions (Mühlbacher et al., 2009), and friendliness of interactions with physicians (Cheraghi-Sohi et al., 2008).

The DCE in Study 2 elicited stated preferences about expressing and receiving positive or angry messages, experimental points, and features of the research context. To define attributes of the emotional tone of negotiation dialogue, we considered scenarios often deployed in studies of anger expression: text-based sending of angry messages modeled on those developed by van Kleef and colleagues (2004). Given the strong aversion to anger expression observed in Study 1, we predict that the exchange of angry messages will be associated with disutility. Hypothesis 3 holds that participants will experience loss in value from sending angry messages.

We varied the context in which anger is expressed. Often, studies rely on students who are engaged in a class exercise (e.g., Greenhalgh et al., 1985; Naquin et al., 2010). These students may have some extrinsic motivation to demonstrate competence, or they could be motivated by an achievement need. Other common methods rely on students in a participant pool where the purpose is to discharge some requirement (e.g., Van Kleef et al., 2004). In these

contexts, points likely have no extrinsic value enduring beyond the experiment. In other designs, including Study 1, experimental points later exchange for money (e.g., Bottom et al., 2006).

Despite the variable motivations for achieving points, greater amounts represent either achievement or value. People who feel positively about a prospect pay more for it (Peters, 2006), suggesting that those who value achievement or monetary sums should favor more points to less. Hypothesis 4 is that participants experience positive utility from earning points from negotiated settlements. The value of points should vary by the context of the negotiation. Where points translate to a source of enduring value, they have utility beyond an artificial context of a study; where points do not translate to enduring value, their value must be temporary. Hypothesis 5 is that points exchangeable for cash yield greater utility than class points which provide greater utility than subject pool participation. To understand the tradeoffs faced by research participants, we recruited undergraduate students who experience research activity on an ongoing basis.

Method

Participants

One hundred thirty undergraduate business students (M_{age} =18.82, SD=1.01, 55% female) from a Midwestern university participated in the study. Signing up for the experiment partly fulfilled research participation requirements. Five participants provided responses with zero variance in the discrete choice task, so they were excluded from analyses.

Procedure

Participants completed the study in a laboratory. They were instructed to take the role of a buyer in a mobile phone contract simulation, adapted from Van Kleef and colleagues (2004a). The briefing included directions on their goal for the negotiation and interpretation of points:

"Your goal is to reach the best possible agreement on this issue. More points are better than less,

and you should obtain as many points as possible". A short quiz tested comprehension. Those answering incorrectly were asked the question again. If they failed twice, the system revealed the correct answer. This procedure aimed to produce informed decisions. Participants made 24 discrete choices between two options, yielding 6,000 observations (i.e., 24 sets of two choices from 125 participants). The study took 20 minutes to complete on average.

Discrete Choice Task

Table 2 lists the attributes and levels within each attribute. To measure cost and consequence of anger misrepresentation, we displayed exemplars of sending and receiving either polite or angry instant messages. To manipulate research context, we explained different settings in which experiments have been conducted. These included in-class exercise, participant pool research credit, and pay for performance contexts. In the latter, participants were informed that points earned from settling issues would exchange for cash after negotiation. To measure utility of experimental points we included one issue with two possible settlement levels (i.e., the "warranty", ranging from 1,000 points to 15,000 points). This was a practical decision designed to reduce the number of questions in a full factorial design.

These attributes generated a 2 (emotional tone expressed to counterpart: positive vs. negative) x 2 (emotional tone received from counterpart: positive vs. negative) x 3 (context: inclass, research credits, and pay for performance) x 2 (warranty: 9 months vs. 1 month) withinsubject design comprising 24 choice sets. We generated the choice sets using the *support.CEs* package in *R* resulting in 24 profiles of negotiation outcomes with a level of each of the attributes combined in a full factorial design. We duplicated this profile set, then randomly paired up the two sets (Aizaki, 2012). We then asked subjects to choose one of two profiles. Appendix C displays an example choice set.

Results

We estimated conditional logit models predicting choice from attributes. Column 2 of Table 3 provides estimates from a main-effects only analysis of the DCE. Exponentiated coefficients represent odds, indicating likelihood of choice when a profile contains a given attribute. Significant coefficients for warranty and the pay for performance indicator exceeded one. Participants experience positive subjective value by earning more points from a negotiated agreement, supporting hypothesis 4. Value from points is greatest when they exchange for money. Participants lose value when receiving an angry message, sending an angry message, or working on an in-class exercise. These effects are consistent with hypothesis 3, that participants in a negotiation will experience disutility from sending angry messages.

An estimate of willingness to pay was calculated by taking the ratio of the numerically defined attribute (i.e., warranty) to the non-numeric denominated ones (Street & Burgess, 2007). The loss in utility associated with receiving angry messages was 11,472 points (95% CI=7,171~17,505). The disutility from sending an angry message was far greater, at 26,839 points (95% CI=20,249~38,404). This disutility exceeded the point value at stake in the negotiation, at 15,000 points. The interactions in Column 3 provide no evidence that loss associated with sending angry messages varies by experimental context. Figure 2 shows that disutility stemming from expressing anger extends clear across contexts.

The value of negotiated points varied with research context. Column 4 in Table 3 shows interaction effects between research context dummies and the warranty terms. The effects of inclass and pay for performance dummies indicate that participants value them more than they would for course credit. The pay for performance and warranty interaction was significant in comparison to the participant pool baseline (p=.04), while the interaction between the in-class

exercise and warranty terms was marginally significant (p = .055). Figure 3 depicts utility associated with points by research setting. Value rises modestly with points during class exercises and for participant pools. The jump is much greater when points translate into cash, consistent with hypothesis 5.

Discussion

Receiving an angry message imposes costs. The level of disutility was such that unless most of the monetary value could be claimed, the negotiator was better off abandoning the deal. But costlier still was sending angry messages. Foregoing more than all of the experimental points available would be preferable to sending an angry message. This pattern of intrinsic disutility can account for the reluctance of many participants in Study 1 to express anger despite the financial incentives to do so.

Figure 3 explains the difference between the effects in the one-sided experiments on anger and concessions and the results reported in Study 1 in this paper and by Campagna and colleagues (2016). Where participants engage in research for points that do not convert to money or some other highly valued resource, increases in points translate into relatively modest increases in utility. Most existing studies of emotion expression have been conducted for course credit. Trading those points in return for increasing the chance of cutting off the receipt of angry messages would yield positive expected utility. When those points can be converted to money, then tolerating the receipt of angry messages and not conceding may appear to be the more rational choice.

Study 3

Moving beyond the widely used laboratory context, we surveyed adult respondents about emotions misrepresented and experienced during a past negotiation. We do so because there is little understanding of how the tactic operates in field settings. Much of the prior research,

including Studies 1 and 2, bracket negotiation in a manner specified by researchers (Barley, 1991). These brackets provide a relatively safe setting for the misrepresentation of anger, as most social science studies aim to minimize harm and discomfort—few consequences exist for research participants who express moderate levels of anger to classmates in the ritualized setting of a classroom or to an anonymous counterpart in a laboratory. In the field, perceived harms from others are monitored and form the basis for outcomes in the future (Labianca & Brass, 2006).

Outside the brackets of a research laboratory, the willingness to misrepresent anger may vary as a function of the counterpart. Many negotiations involve people with whom we have established relationships, including friends and family (Greenhalgh & Chapman, 1995; McGinn & Keros, 2002). Negotiating with such counterparts should heighten accessibility of concerns about the relationship (Gelfand et al., 2006) that guides selection of cooperative tactics (Halpern, 1994). Maintaining favorable relations may preclude misrepresenting anger in order to elicit a concession. Other counterparts could be strangers or those with difficult relationships with the negotiator, which would make the tactic less costly. Thus, hypothesis 6 was that willingness to misrepresent anger is greater with enemies and acquaintances compared to friends and family.

To situate the misrepresentation of anger with other possible forms of emotional misrepresentation, we drew on the circumplex of emotion as a guiding taxonomy. Organized by valence and arousal dimensions (Russell, 1980), the circumplex model suggests discrete categories of emotion that people can experience and/or misrepresent. Asking participants about misrepresenting and feeling distinct emotions at representative points on the circumplex provides a context for fuller understanding of tactical emotion misrepresentation.

Method

Participants

One hundred and twenty participants from Amazon's Mturk service were recruited for the study (M_{age} =38.26, SD=12.45, 50% female). Participants were offered \$1.75 in compensation. Ten provided text that proved unintelligible. Dropping these cases left 110 observations. All other participants were able to recall the experience of participating in a specific negotiation.

Procedure

Participants completed the study via computer at a location of their choosing. After providing consent, they completed a battery of self-report questionnaires and were then assigned to one of four recall conditions. Then they evaluated the success of the negotiation, emotions experienced and misrepresented, as well as perceptions of the negotiation process. The study took 30 minutes to complete on average.

Negotiation Recall Task

Participants were asked to recall a past negotiation in which the counterpart was either a friend (N=29), a family member (N=27), a personal enemy (N=26), or an acquaintance (N=28). We asked people to draw from a wide range of potential negotiation experiences including obtaining a job, making a purchase, settling disputes, or working out future plans with another person. Participants were prompted to describe specific aspects of the negotiation, including the parties involved, the issues, communication, the role of third parties, outcomes for those involved, any lessons learned, and whether the negotiation was finalized or subject to further change.

Measures

Two outcome measures were assessed. Respondents were asked to what extent they felt their needs were met by the negotiation (1=not met at all, 10=needs met completely). They also completed the Subjective Value Inventory (SVI; Curhan et al., 2006) which appraises the instrumental value of the outcomes, perceptions of the self, feelings about the process, and the relationship with the counterpart on a 7-point scale (1=not at all, 7=perfectly). A composite SVI score reflecting the sum of the subscales formed the basis for analysis.

Emotions Experienced and Misrepresented During the Negotiation

We asked participants about their experienced levels of anger and used a single affect label "anger" to represent high arousal negative affect. To inquire about affect at other extremes of the circumplex, we adapted an existing measure of emotion (Tsai et al., 2006) to assess experienced levels of high arousal positive affect (enthusiastic, excited, elated), low arousal positive affect (calm, at rest, relaxed, peaceful), and low arousal negative affect (dull, sleepy, sluggish) during the negotiation. To examine misrepresentation of emotions, we re-administered the scale, with modified instructions: "During the negotiation, did you deliberately try to express the emotions below to get what you wanted?". Responses were made on a 7-point scale (1=not at all, 7=a great deal).

Results

Table 4 shows descriptive statistics and correlations between measures. As seen in Figure 4, misrepresenting anger during a negotiation exhibits considerable right skew with modal and median respondents reporting no expression of this kind at all. Levels of felt anger were relatively low during negotiations, but that experience varied as a function of the counterpart. We conducted an analysis of variance with the level of misrepresented anger as the dependent variable and counterpart type (family, friend, acquaintance, and enemy) as the independent

variable, which proved significant F(3, 106)=3.20, p=.03. In partial support of hypothesis 6, respondents were marginally more likely to misrepresent anger with an enemy ($M_{enemy}=2.58$, SD=2.12) than a family member ($M_{family}=1.56$, SD=1.15; t=2.60, p=.05). The means for friends ($M_{friends}=1.59$, SD=1.30; t=2.57, p=.06) and for an acquaintance ($M_{acquaintance}=1.61$, SD=.92; t=2.49, p=.07) were also lower compared to enemies, but those differences were only marginally significant. None of the other conditions differed. All pairwise tests were adjusted for multiple comparisons using Tukey's HSD method.

Misrepresented anger was associated with higher levels of felt anger. We regressed misrepresented anger on felt anger, while also controlling for the condition dummies, revealing a significant standardized coefficient for felt anger (β =.56, p=10⁻⁹). We estimated a linear mixed model, with level of felt and misrepresented anger as the dependent variable, dummy variables to represent conditions and a dummy variable to indicate a change from misrepresented to felt anger as the predictors. A change from zero to one indicates the extent of suppressing anger. A random effect for participant was also included in the model. The coefficient indicating change from misrepresented to felt anger was significant and positive (β =.22, p=10⁻⁶); people actually felt more anger than they expressed to the counterpart.

Emotions Misrepresented

Respondents recalled misrepresenting positive emotions to a greater extent than negative ones. We estimated a linear mixed model, with the level of misrepresented emotion as the dependent variable, and the condition dummies and a series of dummies to indicate the type of misrepresentation (anger, low activation negative emotion, and high/low activation positive emotion) as the independent variables. A random effect for participant was also included in the model. The analyses revealed a lower level of misrepresented anger ($M_{misrepresemted\ anger}$ =1.82,

SD=1.47) compared to high arousal positive emotions ($M_{high\ arousal\ positive}=2.86$, SD=1.87, t=-5.10, $p=10^{-5}$), and low arousal positive emotions ($M_{low\ arousal\ positive}=3.72$, SD=1.90, t=-9.27, $p=10^{-11}$). However, anger was misrepresented to a greater extent than low arousal negative affect ($M_{low\ arousal\ negative}=1.23$, SD=.68, t=2.85, p=.02).

Misrepresented Anger and Negotiation Outcomes

Misrepresented anger was uncorrelated with recalled outcomes, whereas felt anger correlated negatively with outcomes. We regressed self-rated negotiation success on the condition dummies, level of misrepresented, and level of felt anger. We conducted a similar analysis with the total SVI score as the dependent variable. Misrepresenting anger predicted neither self-rated success (β =.09, p=.36) nor the SVI (β =.07, p=.42)⁴. The standardized coefficient for felt anger was negative for models where self-rated success (β =-.43, p=10⁻⁴) and SVI (β =-.60, p=10⁻⁸) were dependent variables.

Discussion

People infrequently experience or express anger during negotiations. Anger was experienced more often when negotiating with self-categorized enemies than with friends, family, or acquaintances. There was no evidence that misrepresenting anger correlates with higher quality outcomes. This null relation mirrors the null effect observed in Study 1; it is consistent with the idea that misrepresenting anger is not an appealing choice for negotiators, regardless of the counterpart. However, the study used a recall method, which may not generate a representative sample of experiences. In addition, feigning anger itself may feel bad, leading people to inaccurately recall that they did not perform well⁵. Finally, some may have been

⁴ Analyses conducted with SVI subscale scores resulted in a near identical pattern of results, so we report the results obtained with the global score.

⁵ We thank an anonymous reviewer for this suggestion.

reluctant to remember an unpleasant negotiation that included anger, real or misrepresented. In the next study, we address this limitation by directly asking participants to evaluate anger misrepresentation among other tactics negotiators may be reluctant to discuss.

Study 4

Aversion to misrepresenting anger may reflect more than intrapsychic costs or strategic implications. Unwillingness to deploy the tactic could reflect an unfavorable evaluation from an ethical standard. Anger misrepresentation constitutes a form of deception (Methasani et al., 2017), and many people are at least somewhat averse to lying in an exchange context. When meaningful stakes are involved, rates of deception tend to be relatively low (Boles et al., 2000; Croson et al., 2003), especially if the costs to the counterpart will be high (Erat & Gneezy, 2011; Gneezy, 2005). We observed the considerable disutility negotiators associate with receiving anger in Study 2. Exposing the counterpart to an unpleasant experience should degrade a negotiator's perception of their own conduct, which comprises an aspect of the overall social psychological outcome from negotiation (Curhan et al., 2006). Consistent with this view, most ethically questionable tactics (i.e., traditional competitive bargaining, attacking opponent's network, false promises, misrepresenting information, and inappropriate information gathering) receive less than favorable ratings of appropriateness (Cohen, 2010). Given the observed reluctance of negotiators in deploying the tactic, hypothesis 7 is that it would be endorsed to a lesser extent than traditional hard bargaining. Following from Study 3, hypothesis 8 is that misrepresenting anger would be more acceptable with enemies than compared to other types of counterparts.

Prior research does not provide a complete picture of how anger misrepresentation is viewed by negotiators. Misrepresenting negative emotions were observed to be more acceptable

than informational misrepresentation (Cohen, 2010; Fulmer et al., 2009). However, those studies examined negative emotions at the level of composites that included non-anger emotions such as boredom, melancholy, and disappointment. Specific emotions were not examined, nor was the direction of the manipulation (i.e., high or low). We conducted Study 4 to contextualize the use of misrepresentation of anger among other previously identified ethically questionable tactics.

Method

Participants

One hundred participants from Amazon's Mturk service were recruited for the study $(M_{age}=42.07, SD=13.21, 45\% \text{ female})$. Participants were offered \$1.50 payment in return for their participation. They were pre-screened to ensure that none had participated in Study 3.

Procedure

Participants completed the study online. After providing consent, they were asked the likelihood of utilizing a range of different tactics during negotiation. The study took 22 minutes to complete on average.

Measures

Negotiation Tactic Use

We used the set of actions specified by Donahue, Lewicki, and Robert (2000) as ethically questionable in their Self-reported Inappropriate Negotiation Strategies (SINS) Scale. We then added Barry (1999) and Cohen's (2010) considerations relating to strategic manipulation of positive and negative emotions as well as misrepresenting ("Do you attempt to express anger during negotiations, even though you don't actually feel it?") and suppressing anger ("Do you attempt to hide the expression of anger during negotiations, even though you actually feel it?").

Participants were presented with a category of ethically questionable behaviors. For each category of behavior, we asked the probability subjects would attempt to use that tactic during a negotiation on a 7-point scale (1=never, 7=always) without specifying a referent. We then asked the question again, specifying how likely they were to use the tactic with each of five different types of counterparts: friend, family, acquaintance, stranger, and "someone you dislike". Questions were presented in random order with exemplars provided for each category.

Results

Table 5 provides descriptive statistics, intraclass correlations and correlations between tactic use. Participants expressed little willingness to misrepresent anger (see Figure 5) with a modal response of "never". Responding that way was common across all counterpart referents (none 64%; friends 79%; family 73%; acquaintance 73%; stranger 69%; someone disliked 63%). We analyzed differences among referent types using a linear mixed model. The response variable was likelihood of misrepresenting anger, the predictor variable was the type of referent, with a random effect included to represent each participant. Supporting hypothesis 8, comparisons among referent types revealed significant differences between someone disliked ($M_{someone}$ disliked=1.88, SD=1.44), and with friends ($M_{friends}$ =1.38, SD=.90, t=5.58, p=10-6), family (M_{family} =1.46, SD=.91, t=4.68, p=.0001), and acquaintances ($M_{acquaintances}$ =1.53, SD=1.07, t=3.90, t=0.002).

Although the modal response was "never", willingness to misrepresent when negotiating with strangers ($M_{strangers}$ = .67, SD=1.20) was greater than with friends (t=3.23, p=.02). It was also more likely when no referent was specified ($M_{no\ referent}$ =1.67, SD=1.17) as compared to friends (t=-3.23, p=.02). All pairwise tests were adjusted for multiple comparisons using Tukey's HSD method.

Misrepresented Anger Compared to Other Tactics

To simplify comparisons, we averaged willingness to use tactics across types of referents to yield a single score. In Table 5, we report correlations for tactics that indicated acceptable levels of consistency [i.e., $ICC_{(2, k)}$ greater than .40]. The tactics of misrepresented positive emotion ($ICC_{(2, k)}$ =.08), suppressing negative emotion ($ICC_{(2, k)}$ =.05), and suppressing anger ($ICC_{(2, k)}$ =-10⁻⁷) did not reach acceptable levels of consistency and were excluded from further analysis.

We then compared willingness to use the range of ethically questionable tactics, with the results shown in Figure 6. We estimated linear mixed models with likelihood of tactic use as the dependent variable and tactic type as the independent variable, with random effects for participant. In support of hypothesis 7, pairwise tests indicated that misrepresenting anger was less likely to be used as compared to traditional hard bargaining (t=-8.24, p=10⁻¹⁶), bluffing (t=-7.18, p=10⁻¹²), and suppressing positive emotions (t=-7.08, t=10⁻¹²). However, the likelihood of misrepresenting anger was not significantly different compared to deception (t=-2.44, t=-26), misrepresenting negative emotion (t=-2.00, t=-54), inappropriate information gathering (t=0.84, t=-1.00), falsifying information (t=-0.43, t=-1.00), and manipulation of networks (t=-0.04, t=-1.00).

Discussion

Participants expressed considerable reluctance to misrepresent anger across referent types. The most common perspective on the tactic was to disavow its use altogether. If the tactic were universally applicable it would be evaluated as being acceptable across referents of varying levels of affiliation. Instead, most people view at as completely inappropriate regardless of the counterpart. The significant counterpart effect does indicate that people are somewhat less

opposed to engaging in this conduct with someone they already dislike than with a friend or family member. The tactic was also comparable to other ethically dubious behaviors such as inappropriate information gathering, falsifying information, and manipulation of networks. But in general most negotiators do not consider the tactic to be an ethical choice.

Study 5

There are multiple reasons why negotiators may be reluctant to misrepresent anger as a tactic, including intrapsychic, interpersonal, and instrumental reasons. Apart from discomfort, negotiators may have low expectations about the benefits of projecting a display of anger. In addition, interpersonal concerns such as ethicality of the tactic or concerns about the tactic succeeding at all could contribute to the pattern of disutility observed in Studies 1-4. We examined these possibilities across different referent types: stranger, friend, and business partner. We expected concerns about deploying the tactic to be similar when negotiating with business partners and friends, where the presence of emotional ties (Greenhalgh & Chapman, 1995) or concerns about reputational effects (Labianca & Brass, 2006) may discourage misrepresentation of anger. But among strangers where there may be a perception of a competitive process (L. L. Thompson & Hastie, 1990), those associations may be more limited.

We also aimed to demonstrate the coherence of the findings. Studies 1-4 represent disconnected results. If the pattern of behavior observed in the prior studies represent an underlying disutility for the tactic, attitudes, preferences, and forecasts should be positively correlated. Observing these indicators in a single sample allows us to examine the factors that underlie reluctance to deploy the tactic. Given the reluctance of participants to deploy the tactic across studies, hypothesis 9 is that discomfort with the tactic will emerge as the primary reason why negotiators are concerned with the tactic.

We sampled people who have negotiation experience through their work. They should have knowledge of or have internalized professional norms, as well as deeper insights about their likely utility. Such knowledge is consequential, as it informs how negotiators select tactics and is the basis for punishing others when expectations are breached (Fehr & Gächter, 2002).

Methods

Participants

Three hundred and two participants recruited from Prolific Academic completed the study (M_{age} =39.61, SD=11.75, 41% female). Participants were paid £1.25 for completing the study. They were prescreened to ensure having negotiated as part of their work. Two participants who provided non-English responses were excluded from analyses.

Procedure

Participants completed the study online. After providing consent, they were briefed on a negotiation task, based on the one used in Study 2. They were randomly assigned to a negotiation scenario with either a business partner (*N*=100), friend (*N*=101), or stranger (*N*=99) as their counterpart. The negotiation involved a single issue, the warranty period for a mobile phone. The value of the issue ranged from \$0 (9 months of warranty) to \$120 (1 month of warranty), with each month equal to an increment of \$15. The negotiation would be conducted over a computer interface via instant messaging. To ensure comprehension, participants were quizzed about their knowledge of the task and could only proceed if they answered all questions correctly.

Participants then responded to questions about sending polite, friendly, and pleasant messages or angry messages, and were shown exemplars as used in Study 2. The order of presentation was fully counterbalanced. Participants were informed that the reason for sending such messages was

to test their effectiveness in obtaining a concession. The study took 11 minutes to complete on average.

Attitudes, Preferences, and Forecasts About Emotional Tones Used

Participants were asked about their attitudes toward sending polite and angry messages even if they did not feel that way. They indicated how well they thought they could express the emotional tone (1=Extremely badly, 7=Extremely well), the likelihood of sending a message with that tone (1=Extremely unlikely, 7=Extremely likely), their comfort with sending messages with it (1=Extremely uncomfortable, 7=Extremely comfortable), and the ethicality of doing so (1=Extremely unethical, 7=Extremely ethical). They also indicated whether they thought the tactic would prove beneficial (Yes/No), and whether they had any concerns about using the tactic (Yes/No). They were given an opportunity to provide an explanation for these answers. They were also asked about the amount of money in U.S. dollars the counterpart would concede if they used the emotional tone, and the amount of money they would need to 'feel okay about deliberately expressing' the emotional tone. For this last question, participants could either indicate a dollar amount or respond that no amount of money would suffice.

Results

Descriptive statistics and correlations are shown in Table 6. Participants provided more favorable evaluations of polite, friendly, and pleasant tones compared to angry ones. None of the one-way analyses of variance and logistic regressions detected a significant effect of counterpart type, so data were pooled to test mean differences.

Participants thought they could express polite tones more effectively than angry ones $(M_{polite}=5.65, SD=1.09; M_{anger}=3.76, SD=1.75, t=15.87, p=10^{-16})$, were more likely to convey them $(M_{polite}=5.79, SD=1.07; M_{anger}=2.75, SD=1.63, t=26.97, p=10^{-16})$, and were more

comfortable sending them (M_{polite} =5.95, SD=1.10; M_{anger} =2.62, SD=1.47, t=31.33, p=10⁻¹⁶). They also reported that expressing polite tones would be more ethical than angry ones (M_{polite} =4.97, SD=1.33; M_{anger} =2.52, SD=1.24, t=23.33, p=10⁻¹⁶).

Comparing the value of expected concessions revealed a positive expected value for polite and a negative one for angry tones. To limit the influence of outliers, we recoded all responses exceeding the total value of the negotiation to the total value (i.e., \$120)⁶. Polite tones were expected to result in greater concessions than costs ($M_{expected\ concession}$ =52.24, SD=36.56; $M_{expected\ cost}$ =41.25, SD=40.14, t=3.45, p=.001). However, angry tones were expected to result in less concessions than costs ($M_{expected\ concession}$ =29.89, SD=35.47; $M_{expected\ cost}$ =59.78, SD=44.98, t=8.56, p=10⁻¹⁶). Consistent with this pattern, a greater proportion of negotiators indicated the benefits of expressing polite than angry tones in a Z-test of proportions [χ^2 (1)=285.39, p=10⁻¹⁶], whereas the pattern was opposite with angry tones [χ^2 (1)=245.89, p=10⁻¹⁶]. In addition, a greater proportion of people indicated that no amount of money would make them feel comfortable misrepresenting anger (16%) than polite emotional tones (6%) [χ^2 (1)=13.43, p<.001].

Concern over misrepresenting anger was mostly driven by discomfort with the tactic. We regressed concerns about misrepresenting anger on performance expectations, likelihood of sending anger, comfort with sending anger, ethicality of sending anger, concessions expected, and benefits from the tactic. Results of logistic regressions are shown in Table 7. Supporting hypothesis 9, discomfort with the tactic predicted concerns with the tactic, along with a marginal coefficient for negative expectations about benefitting from the tactic. No other factors

⁶ There were 10 outliers for the value of expected concessions from using a polite tone, and 3 outliers for the value of expected concessions from using an angry tone, 16 outliers for the amount of money needed to express a polite tone and 39 outliers for the amount of money needed to express an angry tone. On a purely exploratory basis, we examined gender differences in these outliers. Men expected greater concessions (M_{men} =39.69, SD=80.76) from misrepresented anger than women (M_{women} =23.23, SD=34.60, t=2.41, t=.02).

approached significance. Discomfort with sending angry messages was a concern with business partners and friends, but not with strangers.

Open-ended responses in the business partner condition provides some insight into the source of the discomfort, which includes damaging relationships ("Because you can't build relationships on aggression"; "... it can affect future my future buyers") and breaching norms ("I think it makes you look unprofessional and desperate"). Concerns regarding relationships were also observed in the friend condition ("... You risk losing a friend over a few bucks if he gets too offended or finds out you didn't mean it."), as were intrapsychic costs ("... I would feel off [during] the rest of the negotiation because I wasn't being real.").

Discussion

Using a different method, we observed patterns consistent with prior studies. There is great reluctance to misrepresent anger, people forecast that benefits do not outweigh the costs, and see the tactic as being unethical. A lack of comfort emerged as the sole significant predictor of concerns with the tactic. We interpret this discomfort as comprising affect laden beliefs and expectations that encompass multiple sources of disutility, as depicted in the open-ended responses. Negotiating with business partners and friends seemed to indicate a distinct schema, in which heightened concerns about intrapsychic costs emerged. In a context where people are evaluated against professional norms, or existing friendship ties exist, people were much more sensitive to the intrapsychic costs of deploying the tactic. Qualitative responses yielded further evidence of concern about downstream consequences.

General Discussion

The effect of misrepresenting anger on the counterpart is a negotiation tactic that has been studied through a rigorous program of research. When examined from the perspective of

the expresser, we found that the tactic brings considerable disutility. In Study 1, we observe most people avoid the instruction to misrepresent anger, even when incentivized to do so. The tactic did not result in claiming greater value from negotiated agreements. In the remaining studies, we used a variety of methods to explore the intrapsychic, interpersonal, and instrumental concerns that underlie and compound the disutility.

By analyzing tradeoffs in a DCE, Study 2 showed that the magnitude of loss in value from deploying this tactic potentially exceeds the material value at stake in some negotiations. Study 3 showed a general reluctance to deploy the tactic across a range of counterpart types. Study 4 revealed the widespread sense that the tactic was unethical. Study 5 revealed that concerns with the tactic are driven by a generalized sense of discomfort rather than specific beliefs about one's ability to misrepresent the anger, the ethicality of the tactic, and concessions expected from it.

Because complex business negotiations generally entail considerable strategic risk, particularly the risk of implementation failures, trust development is vital. Misrepresenting anger might be a profitable tactic if it truly induced steep concessions. Such results have been observed in many different experiments where points do not directly exchange for monetary compensation and with a non-reactive counterpart (i.e., a computer program, a confederate, or a scenario). Concessions did not materialize in the two-sided interaction in Study 1 where financial incentives combined with reciprocal interdependence led misrepresented anger expressions to spiral into distrust. The strong correlations between misrepresenting and experiencing anger further indicate that such negative spirals are another reason why negotiators might avoid the tactic. It also imposes ethical and reputational costs.

From a research standpoint, the studies indicate potential benefits from greater use of utility function measurement and of two-sided experimental designs with reciprocal interdependence that more fully models the bargaining process. In addition, modeling and measuring how people approach bargaining and how they implement agreements answers a recent call to study the entire negotiation process (Jang et al., 2018). Those drawing prescriptions from studies that focus on precise measurement of effects under carefully controlled conditions should exercise caution as they translate research (e.g., Bernstein, 2017; Dean, 2012; J. Gross, 2012; Hutson, 2015). Effects obtained in research settings will often prove conditional so claims of generalizability will need to be complemented with evidence from various methods and samples.

Our research also features a number of limitations. In Study 1, instant messaging served as a communication medium. Willingness to express anger through other common communication channels may produce a different pattern. Study 2 took a novel approach to measuring disutility, but preferences of undergraduates in the United States may not reflect the stated preferences among working adults or across cultures. Study 3 utilized a recall design, which may be subject to bias; memory for emotional negotiations could be distorted in systematic ways we did not anticipate. In addition, in the absence of directly manipulated factors, we could not establish causality. Given the number of judgments participants were asked to complete in Study 4, some responses could be subject to fatigue effects. Study 5 produced a number of outliers; greater precision in specifying questions and responses may have avoided this pattern. Across studies, we did not directly study anger as it is expressed face-to-face, or through other mediums. Studies 3-5 could be subject to common method issues. We also did not exhaustively explore the factors that contribute to disutility.

Future research could address limitations using alternate designs, including a study of anger as it occurs in the field. It could also investigate moderators and exceptions to the pattern observed in the pattern of findings reported. For example, there may be considerable individual and group level variability in disutility experienced. People who are low on self-monitoring (Gangestad & Snyder, 2000), or less likely to adjust to the situational context, may be less inclined to misrepresent their emotions than people who readily adjust? Another avenue would be to examine how the willingness to express anger and other emotions depend on specific referents; the aversion to expressing anger with friends observed across Study 4 and 5 suggest that the effects we observed in Study 1 and 2 are likely overestimates of anger expression between friends, but not other referents.

Anger expression in the bargaining process must be understood in light of the functional role of this emotion as it evolved to facilitate social exchange (McCullough et al., 2013; Mislin et al., 2015; Morris & Keltner, 2000). True anger provided a potent evolutionary deterrent to cheating on reciprocal exchange, rendering reciprocal altruism an evolutionary stable strategy (Boehm, 2012). But implying that misrepresentation of anger can yield strategic advantages appears to be unsupported in situations where real stakes are involved and there is possibility for reciprocal interdependence, namely, an ongoing and valuable relationship. There is also evidence of considerable intrapsychic costs misrepresenting anger in negotiation.

⁷ We thank an anonymous reviewer for this suggestion.

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Table 1 $Descriptive \ statistics \ and \ correlations \ for \ variables \ in \ Study \ 1. \ N=116 \sim 132.$

Variable	M	SD	1	2	3	4	5	6	7	8	9	10
1. Seller's costly effort	7126.56	1285.07										
2. Points from 1st phase	6998.11	2256.98	03									
3. Buyer's tone implementation	1381.68	984.17	$.15^{\dagger}$.00								
4. Fixed payment in 2nd phase	7284.38	5050.33	01	.01	34**							
5. Contingent payment in 2nd phase	7304.70	4153.07	$.15^{\dagger}$	01	.08	13						
6. Trust after 1st phase	2.94	0.57	$.15^{\dagger}$.26**	06	.11	05					
7. Benevolence after 1st phase	2.65	0.78	.12	.25**	21*	.10	12	.61**				
8. Integrity after 1st phase	3.29	0.65	$.16^{\dagger}$.26**	07	.02	06	.65**	.69**			
9. Experienced anger after 1st phase	1.85	1.62	12	18*	.02	09	.01	42**	35**	38**		
10. Perceived anger after 1st phase	2.06	2.36	02	17*	02	01	02	38**	36**	34**	.62**	
11. Coder's rating of buyer's anger at 1st phase	2.45	1.97	.00	13	.21*	24**	04	17 [†]	38**	17†	.35**	.45**

Note. † p < .10; * p < .05; ** p < .01.

Table 2

Attribute and levels for the discrete choice experiment in Study 2.

Attribute	Levels	Definitions
Warranty	1 month	1000 points
	9 months	15000 points
Messages sent	You send polite, friendly, and pleasant messages	"I am happy with your offer" "This is going pretty well so far" "I feel good about this negotiation"
	You send angry messages	"Your offer makes me really angry" "This is really getting on my nerves" "This negotiation pisses me off"
Messages received	Counterpart sends you polite, friendly, and pleasant messages	"I am happy with your offer" "This is going pretty well so far" "I feel good about this negotiation"
	Counterpart sends angry messages to you	"Your offer makes me really angry" "This is really getting on my nerves" "This negotiation pisses me off"
Research context	In class	 Points will not affect their grades Will not receive extra credits Counterpart will be a classmate Interaction with the with the counterpart in future classes
	Research Credit	 Compensated with extra credit Amount of points negotiated do not affect amount of credit Negotiation will take place with an anonymous counterpart No interaction with the counterpart after the end of the study
	Pay for Performance	 Cash compensation Points from the negotiation will be reflected in the amount of cash they received Negotiation will take place with an anonymous counterpart No interaction with the counterpart after the end of the study

Table 3

Conditional logit estimates for the effects of negotiation experiment attributes in Study 2.

		Choice in DCE	
Alternative specific constant	.56**	.56**	.55**
Send anger dummy	.34**	.36**	.35**
Receive anger dummy	.63**	.63**	.64**
In-class dummy	.38**	.38**	.26**
Pay for perf. dummy	2.64**	2.71**	1.91**
Warranty	1.00004 **	1.00004^{**}	1.00002^*
In-class*Send anger		.92	
Pay for perf.*Send anger		.90	
In-class*Warranty			1.00003^\dagger
Pay for perf.*Warranty			1.00003^*
Observations	6,000	6,000	6,000
Pseudo R ²	.34	.34	.35
Log Likelihood	-1,363.23	-1,363.04	-1,360.44
Wald Test	$746.65^{**} (df = 6)$	$744.94^{**} (df = 8)$	$749.24^{**} (df = 8)$
Likelihood Ratio Test	$1,432.42^{**} (df = 6)$	$1,432.80^{**} (df = 8)$	$1,438.01^{**} (df = 8)$
Score (Logrank) Test	$1,183.19^{**} (df = 6)$	$1,191.47^{**} (df = 8)$	$1,187.16^{**} (df = 8)$

Note. Exponentiated coefficients are displayed and indicate odds. The send anger dummy = 1 for angry messages and 0 for polite messages. The receive anger dummy = for angry messages and 0 for polite messages. The base category for the research context was the pay for subject pool. Alternative specific constant = dummy variable to represent if profile was presented on the left or right position. In-class = in-class research context. Pay for perf. = pay for performance context. Extra decimal places for warranty and interaction between warranty and other variables displayed to demonstrate significant odds greater than 1. Despite only a small increment above 1, the change from a low to high level of points due to warranty represents an increase of 14,000 points, making even small changes in the coefficient consequential. † p < .10; * p < .05; ** p < .05; ** p < .01.

Table 4 $Descriptive \ statistics \ and \ correlations \ for \ variables \ in \ Study \ 3, \ N=110.$

Variable	Mean	SD	1	2	3	4	5	6	7	8	9	10
1. Felt anger	2.57	1.81	-									
2. Felt high arousal positive affect	3.18	1.68	30	.90								
3. Felt low arousal positive affect	3.66	1.73	48	.45	.96							
4. Felt low arousal negative affect	1.46	.94	.20	.03	.01	.95						
5. Misrepresented anger	1.82	1.47	.58	23	29	.19	-					
6. Misrepresent high arousal positive affect	2.86	1.87	02	.49	.24	.08	13	.92				
7. Misrepresent low arousal positive affect	3.72	1.90	14	.33	.40	.00	29	.47	.95			
8. Misrepresent low arousal negative affect	1.23	.68	.26	.00	02	.77	.23	.02	.00	.93		
9. Self-reported success	7.30	2.72	45	.37	.36	02	21	.20	.10	04	-	
10. Subjective value inventory	5.00	1.49	62	.41	.49	12	33	.18	.15	11	.82	.96

Note. Numbers in italics indicate internal consistencies. Correlation coefficients greater than the absolute value of .19 are significant at the p = .05 level, and those greater than the absolute value of .24 are significant at the p = .01 level.

Table 5 Descriptive statistics and correlations for variables in Study 4, N = 100.

Variable	Mean	SD	1	2	3	4	5	6	7	8	9
1. Traditional hard bargaining	2.59	1.30	.94								
2. Bluffing	2.46	1.28	.58	.91							
3. Falsify information	1.65	.92	.50	.51	.84						
4. Deception	1.89	1.00	.55	.61	.74	.89					
5. Manipulate counterpart's network	1.60	.89	.36	.44	.55	.64	.74				
6. Inappropriate information gathering	1.50	.80	.46	.35	.47	.58	.63	.67			
7. Misrepresent negative emotion	1.84	1.21	.41	.52	.47	.54	.33	.34	.47		
8. Suppress positive emotion	2.45	1.44	.24	.18	.20	.22	.29	.25	.31	.89	
9. Misrepresent anger	1.60	.97	.39	.39	.48	.57	.63	.49	.51	.27	.69

Note. Tactic scores are averaged over all referents. Numbers in italics and bold type indicate intraclass coefficients. Correlation coefficients greater than the absolute value of .19 are significant at the p = .05 level, and those greater than the absolute value of .25 are significant at the p = .01 level.

Table 6 $Descriptive \ statistics \ and \ correlations \ within \ conditions \ in \ Study \ 5, \ N=300$

Variables	N	Mean	SD	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Angry emotional tones												
1. Performance expectation	300	3.76	1.75									
2. Likelihood to send	300	2.75	1.63	.52**								
3. Comfortable	300	2.62	1.47	.54**	.67**							
4. Ethical	300	2.52	1.24	.27**	.44**	.53**						
5. Concession expected in dollars	300	32.94	66.28	.19**	.23**	.24**	.18**					
6. Concession expected (Winsorized)	300	29.89	35.47	.35**	.36**	.36**	.23**	.65**				
7. Dollars needed to misrepresent emotion	253	4,051,546	62,869,669	.08	07	03	03	02	03			
8. Dollars needed to misrepresent emotion (Winsorized)	253	59.78	44.98	.06	.04	06	.00	.20**	.27**	.09		
9. Benefit to expressing emotion (1 = yes)	300	0.19	0.39	.23**	.35**	.30**	.33**	$.10^{\dagger}$.22**	03	08	
10. Concern about expressing emotion $(1 = yes)$	300	0.83	0.37	17**	27**	38**	27**	09	20**	.03	$.12^{\dagger}$	24**
Polite, friendly, and pleasant emotional tones												
1. Performance expectation	300	5.65	1.09									
2. Likelihood to send	300	5.79	1.07	.49**								
3. Comfortable	300	5.95	1.10	.51**	.55**							
4. Ethical	300	4.97	1.33	.36**	.43**	.37**						
5. Concession expected in dollars	300	3,388	57,732	.07	.01	.06	.04					
6. Concession expected (Winsorized)	300	52.24	36.56	.13*	.21**	$.14^*$	$.14^*$	$.11^{\dagger}$				
7. Dollars needed to misrepresent emotion	281	7,576	84,388	.07	.02	.08	.06	.70**	.08			
8. Dollars needed to misrepresent emotion (Winsorized)	281	41.25	40.14	03	02	12*	05	.12*	.43**	.18**		
9. Benefit to expressing emotion $(1 = yes)$	300	0.94	0.24	$.10^{\dagger}$.20**	.19**	.13*	.02	.08	.02	01	
10. Concern about expressing emotion $(1 = yes)$	300	0.26	0.44	32**	35**	31**	37**	03	06	04	.01	19 ^{**}

10. Concern about expressing emotion (1 = yes) 300 0.26 0.44 -.32** -.35** -.31** -.37** -.03 -.06 -.04 .01 -.19* Note. $\dagger p < .10$; * p < .05; ** p < .05; ** p < .01. Dollar values greater than the economic value of the negotiation were Winsorized to equal the highest economic value possible (i.e., \$120). Values greater than one thousand are displayed without decimal points. Dollars needed to misrepresent emotion are not full rank since some participants indicated that no amount of money would suffice.

Table 7

Logistic regression analyses predicting sources of concern in deploying misrepresented anger in Study 5.

Variables	Depender	nt variable: Concern with	h misrepresenting	ganger
Variables -	Full sample	Business partner	Friend	Stranger
Performance expectation	1.13	1.03	1.07	1.35
Likelihood of sending anger	1.00	.87	1.25	.84
Comfort with sending anger	.54**	.45*	.52*	.71
Ethicality of angry messages	.85	.85	.89	.81
Concession expected (Winsorized)	1.00	.97	1.01	1.00
Benefit from tactic $(1 = yes)$	$.48^{\dagger}$.60	.44	.35
Constant	39.39**	175.30**	22.05	23.60
Observations	300	100	101	99
Nagelkerke R ²	.25	.50	.19	.17
Likelihood ratio χ^2 (df = 6)	47.24**	39.71**	11.43^{\dagger}	10.02

Note. † p < .10, * p < .05, ** p < .01. Exponentiated coefficients displayed. Only variables that had full rank data were included in the table.

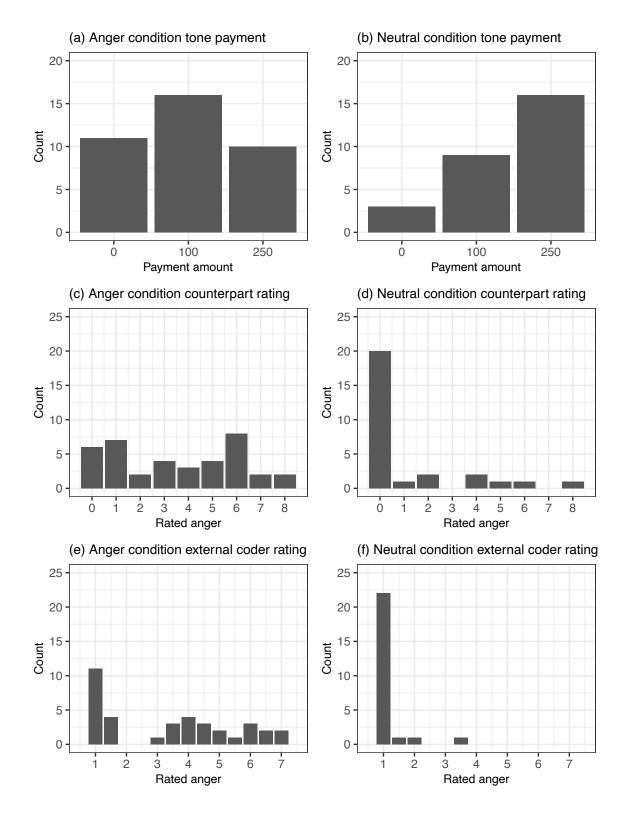


Figure 1. Anger vs. neutral expression condition on tone payment, and counterpart and coder ratings of buyer anger in Study 1

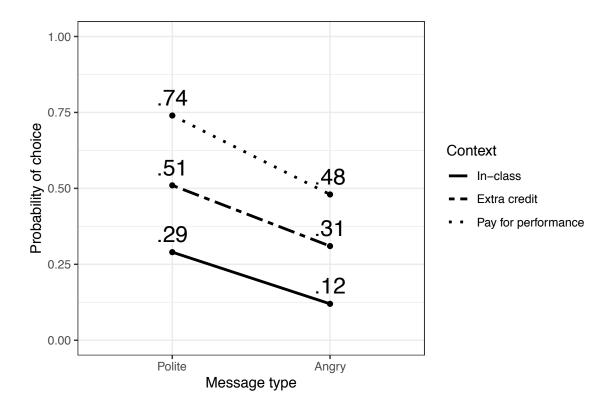


Figure 2. The disutility of anger expression across research contexts.

Note. Numeric figures are point estimates of probability of choice when all other factors are held at average values.

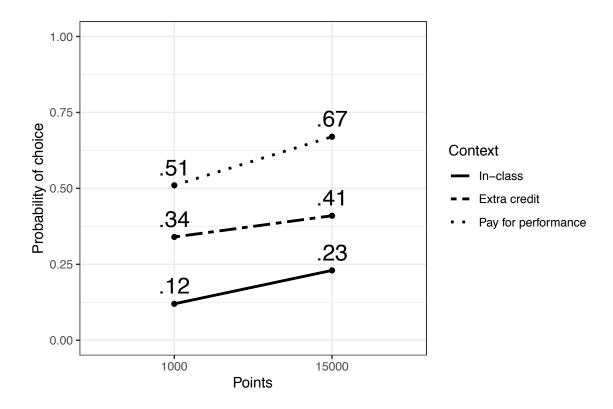


Figure 3. The utility of obtaining points across research contexts.

Note. Numeric figures are point estimates of probability of choice when all other factors are held at average values.

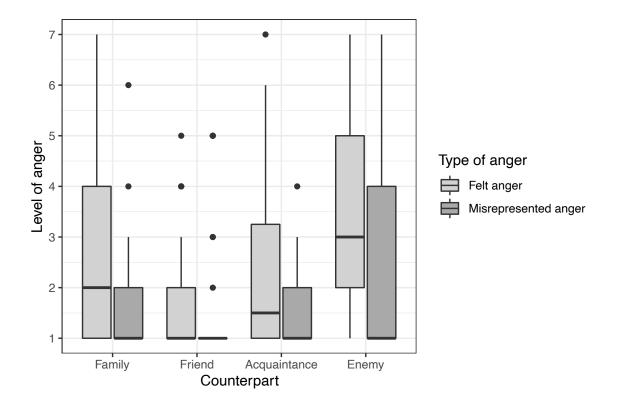


Figure 4. Levels of felt and misrepresented anger reported by survey respondents during a negotiation they recalled in Study 3.

Note. Response scale ranges from 1 = not at all to 7 = a great deal.

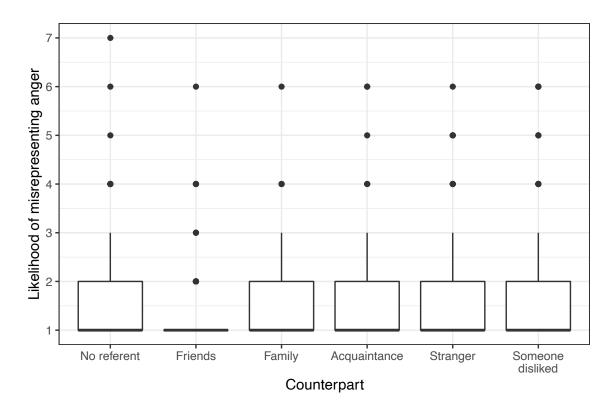


Figure 5. Likelihood of using misrepresenting anger as a tactic during a negotiation as reported in Study 4 across counterpart type.

Note. Response scale ranges from 1 = never to 7 = always.

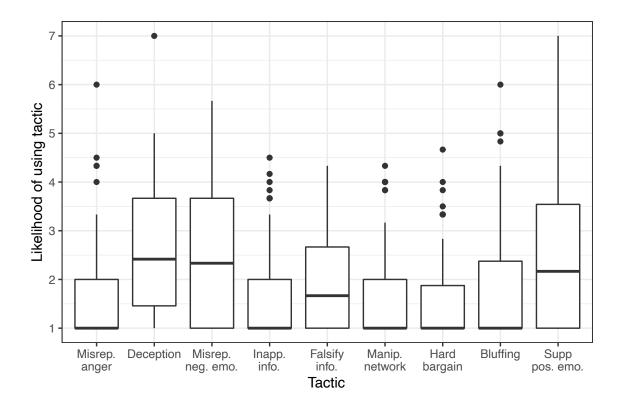


Figure 6. Likelihood of engaging in various ethically questionable tactics during a negotiation as reported by survey respondents in Study 4.

Note. Hard bargain = Traditional hard bargaining, Falsify info. = Falsifying information, Manip. network = Manipulating counterpart's network, Inapp. info. = Inappropriate information gathering, Misrep. neg. emo. = Misrepresent negative emotion, Supp. pos. emo. = Suppressing positive emotions, Misrep. Anger = Misrepresent anger. Response scale ranges from 1 = never to 7 = always.

Appendix A

Payoff charts for the two parties in the supply contract negotiation exercise from Study 1.

(a) From the instructions for Buyer (points accruing to buyer are in parentheses)

Delivery Date	8 months (0)	6 months (500)	4 months (1000)	2 months (1500)	1 month (2000)	
Database Capacity	64 million (500)	128 million (1000)	256 million (1500)	512 million (2000)	1.02 billion (2500)	
OS Support	5 (150)	4 (300)	3 (450)	2 (600)	1 (750)	
Training	4 months (250)	6 months (500)	8 months (750)	10 months (1000)	12 months (1250)	
Features	1 (0)	2 (1250)	4 (2500)	8 (3750)	16 (5000)	

(b) From the instructions for Seller (points accruing to seller are in parentheses)

Delivery Date	1 month (0)	2 months (1250)	4 months (2500)	6 months (3750)	8 months (5000)
Database Capacity	1.02 billion (500)	512 million (1000)	256 million (1500)	128 million (2000)	64 million (2500)
OS Support	5 (250)	4 (500)	3 (750)	2 (1000)	1 (1250)
Training	4 months (150)	6 months (300)	8 months (450)	10 months (600)	12 months (750)
Features	16 (0)	8 (500)	4 (1000)	2 (1500)	1 (2000)

Appendix B

List of measures not included across studies

Self-report measures not included for analysis in Study 1.

- (a) Completed before 1st phase of negotiation.
- Abbreviated six-item version of the state anxiety scale (Marteau & Bekker, 1992).
 - Note. This measure was included to satisfy IRB protocols designed to exclude participants who had a high level of anxiety (i.e., average score greater than 2.33 in a possible range between 1 and 4 comparable to pregnant mothers who received unfavorable diagnostic results about their child; Marteau & Bekker, 1992) at the start of the experiment. A total of 10 participants crossed this threshold, and they did not take part in the study. This measure was not used to test hypotheses, or included in the analyses.
- Social and financial risk taking subscales in the Domain-Specific Risk-Taking scale (Blais & Weber, 2006)
- Self-rated emotional intelligence scale (Brackett et al., 2006)
- Emotional intelligence scale (Schutte et al., 1998)
- Measure of risk preference.
 - O Participants were asked: "Suppose that this entire experiment consisted of a single lottery. You own one ticket that entitles you to play the following game one time. The experimenter tosses a fair coin. If it comes up heads, then you win \$100. If it comes up tails, you win nothing and the experiment ends. Another subject has made an offer to purchase your ticket to this lottery in exchange for cash. You would no longer have the opportunity to win the \$100. But you would no longer face the risk of earning nothing." Participants were asked about their willingness to accept various amounts of cash in exchange for the lottery ticket (\$1, \$5, \$10, \$20, \$30, \$40, \$50, \$60, \$70, \$80, \$90, \$100).
- Facet level Big Five trait measures derived from the International Personality Item Pool (Goldberg et al., 2006), including the facets of neuroticism (anger and anxiety), conscientiousness (dutifulness and self-discipline), and agreeableness (trust and morality).
- (b) Additional dimensions of ratings external coders completed about the negotiation transcripts for first and second phase of negotiations.
- What emotions did the BUYER/SELLER express to the seller? (-2 very negative emotions, 2 very positive emotions)
- How much anger did the BUYER/SELLER seem to express? (1 none at all, 7 a great deal)
- How anxious did the BUYER/SELLER seem to be? (1 not at all, 7 extremely)
- Did the BUYER/SELLER make threats to pressure or intimidate the seller into making a decision? (1 no, 7 made an explicit threat / very intimidating tone)
- Was the BUYER/SELLER cooperative or competitive in the negotiation? (1 very competitive/unwilling to negotiate, 5 very cooperative/willing to negotiate)

• How trustworthy does the BUYER/SELLER appear to be? (1 – very untrustworthy, 5 – very trustworthy)

- How frequently did the BUYER/SELLER ask questions about the seller's preferences? (1 not at all, 5 always)
- How frequently did the BUYER/SELLER make off-task comments? (1 not at all, 7 always)
- How polite was the BUYER/SELLER? (0 extremely impolite, 8 extremely polite)
- Of messages exchanged in this phase of the negotiation, what percentage was in the form of a question by the BUYER/SELLER? (0 none, 6 all the messages were questions)
- (b) Self-report measures completed after 1st and 2nd phase of negotiation.
- Emotions experienced: "thankful", "appreciative", "anxious", "nervous", "tense", "exasperated", "livid", "outraged", "furious", "offended" (0 = did not feel in the slightest, 8 = a great deal)
- Emotions perceived in the counterpart: "fearful", "happy", "sad", "nonemotional", "excited", "anxious" (0 = did not feel in the slightest, 8 = a great deal)
- (c) Self-report measures completed after 2nd phase of negotiation.
- Overall trust, benevolence, and integrity perceptions of counterpart, experienced anger, perceived anger in counterpart, and coder's rating of anger. These used the same scales as in 1st phase of negotiation.

Self-report measures not included for analysis in Study 2.

- Need for achievement (Schönbrodt & Gerstenberg, 2012)
- Machiavellianism (Jones & Paulhus, 2014)
- Facet level Big Five measures derived from the International Personality Item Pool (Yarkoni, 2010), including facets of emotional stability/neuroticism (anxiety, self-consciousness, impulsiveness, and vulnerability), extraversion (warmth, assertiveness, and positive emotions), agreeableness (trust, altruism, compliance, tender-mindedness), and conscientiousness (dutifulness and self-discipline).

Self-report measures not included for analysis in Study 3.

- Machiavellianism (Jones & Paulhus, 2014)
- Emotional intelligence scale (Law et al., 2004)
- High arousal negative affect (Tsai et al., 2006)
- Facet-level measures of two Big Five factors derived from the International Personality Item Pool (Goldberg et al., 2006), including facets of neuroticism (anxiety and anger) and agreeableness (trust and morality).

Self-report measures not included for analysis in Study 4.

• Test of Self-Conscious Affect-Version 3 (Tangney et al., 2000)

- Machiavellianism (Jones & Paulhus, 2014)
- Emotional intelligence scale (Law et al., 2004)
- Facet-level measures of two Big Five factors derived from the International Personality Item Pool (Goldberg et al., 2006), including facets of neuroticism (anxiety and anger) and agreeableness (trust and morality).

Appendix C

Example of discrete choice task in Study 2.

Q 1 / 24

Imagine the options below represented the outcomes of the negotiation - the warranty period you agreed to, the kinds of messages you and your counterpart exchanged, and the context in which the simulation was run.

Which outcome would you pick?

9 month warranty

You send polite, friendly, and pleasant messages to the counterpart

Counterpart sends angry messages to you

Performance based pay

1 month warranty

You send polite, friendly, and pleasant messages to the counterpart

Counterpart sends polite, friendly, and pleasant messages to you

Performance based pay