

# The Positive and Negative Effects of Anger on Dispute Resolution: Evidence From Electronically Mediated Disputes

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Scholars have argued that anger expressed by participants in mediation is counterproductive; yet, there is also reason to believe that expressions of anger can be productive. The authors tested these competing theories of emotion by using data from online mediation. Results show that expression of anger lowers the resolution rate in mediation and that this effect occurs in part because expressing anger generates an angry response by the other party. However, when respondents are especially vulnerable, expressions of anger by the filer do not hinder settlement. The authors also examined precursors to anger, such as value of dispute and reputation, and the degree to which a focus on dispute resolution is reciprocated.

Anger is frequently represented as a barrier to settlement in mediation, hindering conflict management efforts (Berkovitch, 1984), legitimizing aggression (Averill, 1993), and inhibiting relationship development (C. W. Moore, 1996). C. W. Moore concluded that the role of the mediator is to “neutralize” anger and get disputants instead to “focus on specific issues in dispute” (p. 166). Although we do not look at the behavior of mediators in this article, the validity of such prescriptions depends on whether this assessment of anger is accurate. Does anger reduce the likelihood of settlement? In this study, we proposed hypotheses about the negative and positive effects of expressing anger on reaching settlements in mediation. We tested those hypotheses by using a unique database—a sample of disputes from SquareTrade, a company that provides online mediation services for users of eBay as well as other companies that conduct business through the Internet.

This study extends prior work on anger and disputes in four ways. First, this is the first large-scale quantitative study of emotions that used data from real disputes (rather than simulated negotiations or laboratory interactions), enhancing the real-world applicability of our findings. As Barry, Fulmer, and Van Kleef (in press) pointed out, many experimental studies of emotion can not capture the full range of emotions that come from having real

issues at stake. Second, our study considers both the negative effects of anger (the classical view of anger in disputes) as well as some positive effects of anger (a newly emerging view). Third, we were able to examine how preexisting conditions, such as reputation, affect the likelihood that anger will be expressed in the first place. Fourth, given the presence of clearly time-ordered data, we were able to trace the exact steps through which emotions affect resolution in mediation. These results advance our understanding of how emotions and dispute resolution interact and help mediators know when to encourage and when to discourage the expression of negative emotions (although we do not specifically study mediator tactics here).

## Anger as Disruptive to Dispute Resolution

There is actually little direct evidence in support of the claim that anger blocks dispute resolution, although research on negotiation and human aggression provides some indirect evidence. In terms of its intrapersonal effects, the experience of anger has been linked to a lower regard for opponents’ interests and less accuracy in judging those interests (Allred, Mallozzi, Matsui, & Raia, 1997), the use of more distributive tactics (Olekalns & Smith, 2003), higher rates of rejecting offers (Pillutla & Murnighan, 1996), less thought about the consequences of one’s own aggressive actions (Berkowitz, 1988, 1989), and less restraint in the face of threats (Baron, 1973; Rogers, 1980). In terms of its interpersonal effects, the expression of anger leads opponents to evaluate the negotiation and the negotiator less favorably (Van Kleef, De Dreu, & Manstead, 2003), and higher levels of anger across negotiators is related to lower joint gains, worse interpersonal rapport, and a higher incidence of impasse (Allred et al., 1997; D. A. Moore, Kurtzberg, Thompson, & Morris, 1999). Research on negotiations and human aggression consistently suggests that anger should hinder the resolution of disputes.

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These studies, however, were not done in a dispute resolution setting. Unlike in deal-making settings where parties come to the table optimistic about a potential future relationship, in dispute resolution settings, parties come to the table because one has made a claim the other has rejected (Felstiner, Able, & Sarat, 1981). In deal making, emotions may emerge, but in dispute resolution, the parties usually begin with strongly felt emotions (Brett, 2001). This difference suggests that emotional dynamics of dispute resolution may be different and that initial communications may be especially important in dispute settings. In addition, unlike laboratory studies of human aggression, responses in a dispute setting center on real issues and consequences.

### When Anger Benefits Dispute Resolution

Although it is common to see anger as disruptive to dispute resolution, it is also worth considering whether anger, under certain conditions, might actually benefit the dispute resolution process. Recent research on the social functions of emotions suggests that the expression of anger may communicate that the issue under consideration is very important to the expresser and that the expresser is not going to yield in his or her position (Frank, 1988; Fridlund, 1991, 1994; Hinde, 1985; Keltner & Haidt, 2001; Morris & Keltner, 2000). Thus, recipients of anger may concede at times, giving in to the expresser's demands, or they may choose not to reciprocate but to redirect the dispute toward resolution (Brett, Shapiro, & Lytle, 1998; Gottman & Levenson, 1992). Consistent with this notion, classic research on human aggression has shown that when attacks produce fear, people respond by trying to escape or avoid the situation (Berkowitz, 1988), and recent research in negotiations (Van Kleef et al., 2003) has shown that the expression of anger can cause opponents to feel fear and make larger concessions. Expressing anger can be functional to one's self-interest (Feshbach, 1989).

When will the expression of anger lead to more conciliatory responses in others? We believe the recipients of anger will respond in a conciliatory way when they have more to lose in the event of an impasse. That is, when disputing parties are in a position of vulnerability, they should be more sensitive to the threatening messages that anger conveys. Building from this work, we tested the hypothesis that the expression of anger will lead to a higher rate of resolution when the recipient of anger is in a weaker position.

### SquareTrade and the Online Mediation of Disputes

Among the tens of thousands of deals that happen every day on eBay, some generate complaints. Perhaps the payment is not made on time or the buyer thinks the product is not what was described on the site. In these cases, the parties can communicate with each other to resolve their dispute, but if that fails, they can reach SquareTrade through eBay's customer service site and file a claim electronically. Once a claim has been filed, SquareTrade automatically emails the other party, informing them that a case has been filed and asking them what they would be willing to do to resolve the dispute. If no settlement is reached by negotiation through the SquareTrade site, the filer can ask for a mediator to become involved for a fee of \$15. At this point, a mediator (an independent contractor) is assigned to the case. The mediator contacts both parties electronically to explain the process and to collect initial

comments. One important characteristic of trading on eBay is that each party is asked to evaluate the other party within 90 days of the deal, providing positive, neutral, or negative feedback. These ratings are available for anyone who uses the Web to see, so they may affect who is willing to buy from or sell to each person in the future. If negative feedback is given, that itself can be a source of conflict. Moreover, the only way for an eBay feedback score to be changed is if eBay receives a directive to do so from SquareTrade. A SquareTrade mediator will only so direct if both parties have agreed to the change.

## Hypotheses

### *The Effects of Anger on the Resolution of Disputes*

On the basis of the conceptual analysis presented in the prior section, we expected that the expression of anger would have a negative impact, whereas a focus on dispute resolution would have a positive impact on settlement.

*Hypothesis 1:* Settlement is less likely if the parties express anger.

*Hypothesis 2:* Settlement is more likely if the parties focus on dispute resolution.

### *Why Anger Is Harmful: The Paths From Negative Emotion to the Resolution of Disputes*

Anger may reduce the likelihood of settlement for two reasons. First, when one person expresses negative emotions such as anger, it can evoke similar negative emotional expressions in others (Allred, 1999; Allred et al., 1997; Hatfield, Cacioppo, & Rapson, 1984; Rothbart & Hallmark, 1988; Van Kleef et al., 2003). This process does not require direct physical or verbal contact (the basis of primitive social contagion) but can occur through electronic communications that convey anger with text (Van Kleef et al., 2003). Expressions of anger are perceived as expressions of dominance (Keating et al., 1981; Knutson, 1996; Tiedens, Ellsworth, & Mesquita, 2000), hostility (Tiedens, 2001), accusations of wrongdoing (Smith & Ellsworth, 1985), and a more aloof and arrogant stance by the expresser (Knutson, 1996), all of which are likely to produce angry responses in the other party, making it less likely they will find ways to bridge their differences (Allred et al., 1997; Forgas, 1998; Gottman & Levenson, 1992). These effects may be especially pronounced when communications occur by e-mail (Friedman & Currall, 2002; D. A. Moore et al., 1999). Although existing research has shown repeatedly that cooperative and competitive behaviors are reciprocated (Axelrod, 1984; Felson, 1984; Gouldner, 1960; Pruitt & Rubin, 1986; Taylor, 1967), we argue here that emotional expressions are reciprocated.

*Hypothesis 3:* If the filer expresses anger, the respondent is more likely to express anger.

Second, anger may decrease the likelihood of settlement in that it reduces parties' motivation and ability to solve the dispute (this is part of the intrapersonal effects of anger discussed above). Feelings of anger cause people to focus less on their own interests and more on retaliating against the other party (Frank, 1988; Pillutla & Murnighan, 1996). Anger also affects cognitive processing and

interferes with the ability to solve complex problems (Janis & Mann, 1977). In a study of conflict in university residence halls, resident assistants were less likely to use problem-solving tactics when there was hostility between disputants (Ross, Fischer, Baker, & Buchholz, 1997), and in an experimental study, observers of a dispute were less likely to be able to identify optimal solutions when the parties had a bad relationship (Thompson & Kim, 2000).

*Hypothesis 4:* If the filer expresses anger, the respondent is less likely to engage in dispute resolution.

Conversely, when filers initiate the mediation with a resolution orientation, we expect that they will elicit a resolution orientation from the respondent. Although cooperation is itself “a highly fragile process that is difficult to establish and maintain” (Weingart & Olekalns, in press), there is evidence that negotiators reciprocate a range of cooperative behaviors (Donohue, Diez, & Hamilton, 1984; Olekalns & Smith, 2003; Putnam & Jones, 1982; Weingart, Prietula, Hyder, & Genovese, 1999). Thus, we expect a resolution-focused orientation to be reciprocated.

*Hypothesis 5:* If the filer focuses on dispute resolution, the respondent is likely to reciprocate.

Because of the sequential nature of these interactions (the filer makes a claim, the respondent responds), we expect that the effect of the filer’s expressed anger and dispute resolution orientation on settlement will be mediated by the respondent’s expressed anger and dispute resolution orientation. That is, expressions of anger by the filer generate expressions of anger by the respondent, which then have a negative impact on settlement. Expressions of anger by the filer are also expected to prompt a decrease in the respondent’s focus on dispute resolution, which in turn reduces the likelihood of settlement. By contrast, we expect that when a filer adopts a dispute resolution orientation towards the conflict, the respondent will reciprocate by adopting a similar strategy. When this occurs, we expect a greater likelihood of settlement.

*Hypothesis 6a:* The negative impact of filer’s expressed anger on settlement is mediated by its effect on respondent’s expressed anger and dispute resolution orientation.

*Hypothesis 6b:* The positive impact of filer’s dispute resolution orientation on settlement is mediated by its effect on respondent’s dispute resolution orientation.

### *When Anger Is Helpful*

As argued above, we believe the expression of anger will lead to higher rates of resolution when the recipient of anger has more to lose in the event of an impasse. In the current context, we thought that eBay users who already have poor reputations would have more to lose because they want to avoid gaining an even worse reputation. Within eBay, good reputations are highly prized. Buyers can easily examine a seller’s prior feedback scores and choose whether to bid for an item based on those scores. Sellers can set up a rule prior to a bid requiring that those who buy from them have a good reputation. Control of reputation is so fierce that even neutral feedback is taken very seriously. Thus, in terms of the effects of expressed anger, we predicted the following interaction hypothesis:

*Hypothesis 7:* Expressions of anger by the filer should lead to higher resolution rates when the respondent has a bad reputation. However, expressions of anger by the filer should lead to lower resolution rates when the respondent does not have a bad reputation.

### *Conditions That Facilitate Anger Versus a Focus on Dispute Resolution*

If anger expressions typically lead to lower settlement rates and if focusing on resolving the dispute leads to higher settlement rates, it is important to understand the conditions that make expressions of anger or focusing on dispute resolution more likely. That is, when are disputing parties more likely to erupt in expressions of anger, and when are they more likely to concentrate on resolving the dispute?<sup>1</sup>

Emotion research finds that people feel angry when they believe that another party is responsible for their misfortune (Smith & Ellsworth, 1985). For example, someone who has been fired from his or her job is more likely to experience anger if she believes someone else caused her to be fired, like a scheming coworker or an incompetent boss (Smith & Ellsworth, 1985). This suggests that in the online disputes we examined, the parties should express anger when they believe the other party is to blame for their dispute. We examined this idea by focusing on parties’ reputations prior to the filing of the claim. We reasoned that filers would express more anger when the person against whom they were making the claim had bad eBay reputations.

*Hypothesis 8:* Filers are more likely to express anger when the respondent has a bad eBay reputation.

In terms of the conditions that facilitate a focus on dispute resolution, we reasoned that parties would work harder on resolving their dispute when there was more at stake. In ultimatum games, when the stakes are higher, the responder is more likely to accept a smaller percentage of the total than when the stakes are lower (Cameron, 1999). Similarly, when the stakes are real (rather than hypothetical as in gambling exercises), participants are more risk averse (Binswanger, 1980, 1981). In the current study, we expected filers to focus more on resolution under two conditions: (a) when the dollar amount involved in the dispute is higher so that parties have more to lose in terms of financial value if the dispute ends in an impasse and (b) when feedback is itself an issue in the disputes because having a good reputation is highly prized by eBay users.

*Hypothesis 9a:* Filers will focus more on dispute resolution when the dollar amount involved in the transaction is high.

*Hypothesis 9b:* Filers will focus more on dispute resolution when reputation is an issue in the dispute.

<sup>1</sup> We based our hypotheses on the assumption that, by and large, participants’ expressions of anger were genuine expressions of angry feelings. Although we cannot know for sure, we believe this assumption to be more plausible than the idea that participants did not feel anger, but were strategically expressing anger with the aim of making their opponent concede.

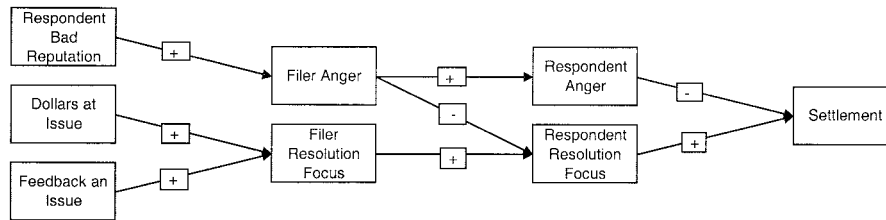


Figure 1. Theorized effects.

All hypotheses listed to this point, except the interaction predicted in Hypothesis 7, are included in the model shown in Figure 1.

## Method

### The Research Site

SquareTrade.com is an online dispute resolution firm. The site allows parties to negotiate directly through the site or to request an online mediator. Once a mediator is involved and the initial filer comments have been conveyed to the respondent, all direct communication between the disputants through the SquareTrade site is cut off. Participants who request mediation pay a small fee (that fee was \$15 at the time of our study). SquareTrade.com has a contract with eBay to provide dispute resolution services. Key to the eBay–SquareTrade relationship is the arrangement that negative feedback about users can only be removed on the notification of a SquareTrade mediator that a settlement has been agreed, which includes the removal of negative feedback.

### Cases

Our study was limited to the eBay-generated disputes that were opened on the SquareTrade site during a specified period of time and for which a mediator was requested. Although this sample included 681 cases, we removed 217 cases in which the parties were not really using SquareTrade for mediation but instead just to change a reputation score. For example, one party hit the wrong key when giving feedback about the other party; there was not really a dispute, but the only way to change a rating on the eBay system is to report this error to a mediator. We also removed 93 cases in which there was no response to the claim (in these cases there were no interactions) and 16 cases in which the resolution status was ambiguous. Our analysis sample was 355 cases.

### Data

**Settlement.** In these 355 cases, we coded as settlement those situations in which both parties explicitly accepted a resolution proposed by the mediator (by clicking on an *I accept resolution* button) that may have involved the removing of negative or neutral feedback. All other cases—one or both parties abandoning the mediation process explicitly or implicitly—were coded as no agreement situations.

**Participant comments.** For the purpose of this study, we focused on the initial comments made by the filer and on those made by the respondent before the mediator became involved. In both cases, we included any open-ended comments made, as well as the text from the box where parties explained their problem. In the SquareTrade system, the filer's initial comments are conveyed to the respondent who then has a chance to react. This occurs prior to the involvement of the mediator.

We measured anger using Pennebaker, Francis, and Booth's (2001) Linguistic Inquiry Word Count, which reported the percentage of words that expressed anger. Some examples of words put into this category include *hate*, *pissed*. We measured orientation toward resolution qualitatively. The two coders (paid research assistants) read each comment and

placed it in one of two categories, *orientation towards resolution* or *other*. Cohen's kappa was .73. We defined orientation toward resolution as evidence of willingness to resolve the dispute, for example, an explicit suggestion for how the dispute could be resolved or agreement with the other person's suggestion for resolving the dispute. Examples are in the Appendix. All other comments were defined as *other*.

**Exogenous variables.** We extracted the following additional variables from SquareTrade's database: whether the filer was buyer or seller, the value of the transaction, and whether the nature of the feedback given was itself an issue in the dispute. We recorded feedback data from eBay files in three categories: sum of positive, neutral, and negative feedback prior to the SquareTrade filing. We used these data to create a reputation variable that is the ratio of negative and neutral feedback to positive feedback for each filer and respondent.<sup>2</sup>

### Analysis

We tested the model in Figure 1 by using AMOS in SPSS. First, we fitted a model containing all linear hypothesized effects. We then trimmed the model of nonsignificant effects. Finally, we tested the contribution to prediction of the interaction.

## Results

The correlations in Table 1 support the simple effects in Hypotheses 1 through 3, 5, and 8a and 8b. The angrier the filer is, the less likely a settlement (Hypothesis 1). The more the filer was oriented toward resolution, the more likely a settlement (Hypothesis 2). The more angry the filer, the more angry the respondent (Hypothesis 3), although filer anger was only marginally related to respondent dispute resolution orientation ( $p < .10$ ; Hypothesis 4). However, when the filer was oriented toward the resolution of the dispute, the respondent also took this focus (Hypothesis 5). The correlation between respondent bad reputation and filer anger was marginally significant ( $p < .10$ ). However, the more money at stake (Hypothesis 9a) and when the filer's reputation was an issue (Hypothesis 9b), the more likely the filer was to be resolution focused.

The conceptual model in Figure 1 fit the data with the exception of the path from filer anger to respondent dispute resolution orientation. After trimming this path, the resulting model did not provide a significantly better fit (chi-square changed from 51.08 to 42.96, or 1.88), so we retained the path from filer anger to

<sup>2</sup> To ensure that reputation scores reflected data visible at the time when a dispute was filed (rather than what their reputation was when we collected data), we collected archival data on a subset of cases. Regressions predicting prior feedback scores from reputation scores at time of data collection had  $R^2 > .95$ . We used the beta weights from this analysis to estimate positive, negative, and neutral feedback at the time of filing.

Table 1  
Means, Standard Deviations, and Correlations

Variable	<i>M</i>	<i>SD</i>	1	2	3	4	5	6	7	8
1. Settlement	0.42	0.50	—							
2. Filer anger	0.28	0.78	-.11*	—						
3. Filer resolution focus	0.04	0.19	.12**	-.07	—					
4. Respondent anger	0.38	0.95	-.10*	.49***	-.03	—				
5. Respondent resolution focus	0.15	0.35	.11*	-.08	.16**	-.10	—			
6. Respondent bad reputation	0.04	0.10	-.13*	.07	-.07	.05	-.09	—		
7. Feedback an issue	0.34	0.48	.22**	.04	.13*	.13*	.04	.01	—	
8. Dollars at issue	498.70	1,668.51	-.11*	-.03	.20**	-.03	-.01	-.01	-.10	—

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

respondent dispute resolution orientation. This model is in Figure 2. The fit for this model was acceptable (comparative fit index [CFI] = .96, normed fit index [NFI] = .93, root-mean-square error of approximation [RMSEA] = .07).

Moving from left to right in the model, the results confirm that the respondent's bad reputation, the money at stake, and whether reputation was an issue all affected the way the filer framed the claim. When a respondent had a poor reputation the filer was more likely to express anger (Hypothesis 8). When there was more money at stake (Hypothesis 9a) or when the reputation itself was an issue (Hypothesis 9b), the filer was more likely to indicate an orientation toward resolution. Results from testing the model as a whole also partially support the hypotheses predicting that respondent behavior is influenced by filer behavior. When filer expressed anger, respondent was more likely to express anger (Hypothesis 3), and when filer expressed an orientation toward resolution, the filer was more likely to do the same (Hypothesis 5). However, filer expression of anger did not significantly affect the likelihood that the respondent expressed a resolution focus (Hypothesis 4).

To test the mediated hypotheses (Hypothesis 6a and Hypothesis 6b), we added direct effects of filer anger and filer dispute resolution orientation to settlement to the model. Hypothesis 6a predicted that the impact of filer behavior on resolution would be mediated by respondent behavior. Adding the direct path from filer anger to settlement did not improve the fit of the model. Adding the direct path from filer dispute orientation to settlement did improve the fit of the model, disconfirming the full mediation prediction of Hypothesis 6b,  $\Delta\chi^2(1, N = 365) = 4.16, p < .05$ . Nevertheless, with this additional direct path, the path from filer solution-orientation to respondent solution-orientation remained significant, as did the path from respondent solution-orientation to settlement. If we constrain the latter path to equal 0 (suggesting that the indirect path does not matter), the model became worse,  $\Delta\chi^2(1, N = 365) = 5.40, p < .05$ . This suggests that the effects of filer's solution orientation on settlement were both indirect, mediated by respondent's solution orientation, and direct.<sup>3</sup>

Hypothesis 7 suggests that filer anger may have a positive impact on settlement when the respondent has a particularly bad reputation. To test this hypothesis, we ran logistic regression models with settlement as the dependent variable, and filer anger, respondent bad reputation, and an interaction term where filer anger was multiplied by filer bad reputation as the independent variables (all were centered; Aiken & West, 1991). The chi-square for the model excluding the interaction term was 13.14 ( $df = 2, N = 329$ ),  $p < .01$  (see Model 1, Table 2), whereas it was 27.43

for the model including the interaction terms (see Model 2, Table 2). This increase in chi-square, with the addition of 1 *df*, was significant at  $p < .001$ , confirming Hypothesis 7. The interaction effect is shown in Figure 3. The slope of the effect of anger on resolution was  $-1.69$  ( $p < .001$ ), with respondent bad reputation set at 1 *SD* below the mean, whereas it was  $.72$  ( $p = .11$ ) with respondent bad reputation set at 1 *SD* above the mean (using the method described in Aiken & West, 1991). These two slopes were significantly different from each other ( $p < .001$ ). These results indicate that anger has no effect on outcome when respondent has a bad reputation. It is still possible, however, that these results were due to other reasons than what we theorized. It may be that those with bad reputations knew that they were at least partially to blame for the conflict, making them more likely to settle. Our data do not allow us to know conclusively that this interaction occurred for the reasons we theorized.

## Discussion

We began this article by asking, Is anger as disruptive to mediation as practitioners suggest? The answer is a qualified yes. Expressions of anger trigger corresponding expressions of anger by the other party, which reduces the likelihood of settlement. This emotional reciprocity effect is not surprising, given prior findings of reciprocity in human aggression experiments (Taylor, 1967), negotiation simulations (Brett et al., 1998), and prisoner dilemma games (Axelrod, 1984). However, it is useful to confirm that it occurs in naturally occurring disputes as well. Only a few quantitative studies have found reciprocity in real-world contexts (e.g., Leng, 1993), and this type of analysis has not been done for mediation. In particular, no one has previously confirmed that the damage created by expressions of anger in mediation occur by the response it triggers in the other party. It is also useful to confirm that this type of reciprocity occurs in electronic as well as face-

<sup>3</sup> We also tested to see if the relationship we found between filer and respondent anger (and filer and respondent resolution focus) might be spurious. That is, whether these correlations were due to the fact that some exogenous factor, such as dollars at issue, caused high levels of both filer and respondent anger (or both filer and respondent dispute focus). Adding direct paths from our exogenous variables to both filer anger and respondent anger did not change the coefficient for path from filer anger to respondent anger. Adding direct paths to both filer and respondent resolution focus did not change the coefficient for the path from filer dispute focus to respondent dispute focus.

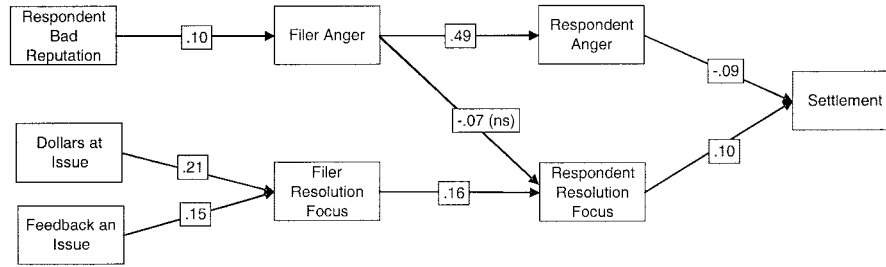


Figure 2. Structural equation modeling results.

to-face communications. Expressions of anger create a negative cycle (Olekalns, Lau, & Smith, 2002), although neither side can see nor hear each other. Clearly, primitive social contagion is not necessary to generate emotional reciprocity.

Our answer to the question about the negative effects of anger in mediation was only a qualified yes because we have also found that anger does not always trigger an angry response in the other party. When the other party was vulnerable—had a low reputation at the start of the dispute—expressions of anger by the filer did not lower settlement rates. Consistent with emerging theories of the functions of emotions (Frank, 1988), anger can be productive (or at least not harmful) if it gets the other party to back off. So, although mediators may want to control outbursts of emotion, they may not always need to do so. Indeed, intense emotional expressions may help the parties feel better (Niederhoffer & Pennebaker, 2002), which should be a topic for future research.

We also identified a positive cycle, in which initial dispute resolution focus produces a similar response in the other party. Both the initial and reciprocated resolution focus enhance resolution. These findings provide more evidence in support of positive cycles in mediation. This is significant, given that positive reciprocity has been found less consistently than negative reciprocity (Weingart & Olekalns, in press).

What is more clearly novel in these data is the information it provides about initial triggers of anger and dispute orientation. Bad reputation enhances filer anger, whereas high stakes (higher value conflict and ones where reputation is itself an issue) seem to encourage a dispute focus. Our findings on reputation are especially interesting in light of work by economists (e.g., Krepes & Wilson, 1982; Tirole, 1996) who have examined the economic benefits of reputation. Here, we find that those with good reputa-

tions may act less carefully than those who have bad reputations (i.e., responding to anger with anger), much to their own detriment.

These findings have potentially important practical implications. Participants, mediators, and online mediation designers all need to know that initial expressions have a dramatic and possibly irreversible impact on dispute resolution. Although our analysis only focused on initial comments by both sides, these comments still had an impact on final resolution rates. For Web site designers, it might be better not to allow the initial comments to be conveyed to the other party in case they convey anger, or it may be useful for the mediator to be involved earlier so that she or he can filter these initial comments.

The online asynchronous format for exchanges through the SquareTrade site may be more conducive to the expression of anger than face-to-face interchanges. There is substantial evidence that people are less emotionally inhibited in electronic than face-to-face formats (Kiesler & Sproull, 1992; Short, Williams, & Christie, 1976) because of unclear social norms for online communications and the social distance that comes from the lack of nonverbal cues. It seems likely that the asynchronous electronic format made the expression of anger easier for the disputants in this study than it would be for people disputing in a face-to-face environment.

The online asynchronous format of the SquareTrade process may also be more conducive to a solution orientation than is face-to-face communications. The online format is a text format. Face-to-face communications, in contrast, are fragments of speech punctuated by interruptions. The process of having to write to describe a claim or defend the rejection of a claim requires cognitive processing. Disputants presumably think about what they should say. In writing about the claim or their reasons for rejecting

Table 2  
Moderated Logistic Regression Results Predicting Settlement

Variable or statistic	Model					
	1			2		
	$\beta$	SE	Exp ( $\beta$ )	$\beta$	SE	Exp ( $\beta$ )
Filer anger	-0.53	0.24	0.59*	-0.49	0.27	0.62
Respondent bad reputation	-4.49	2.05	0.01*	-8.64	2.57	0.001***
Filer Anger $\times$ Respondent Bad Reputation				12.03	3.50	167,686.22***
$\chi^2$	13.14**			27.43***		
df	2			3		
N	329			329		

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

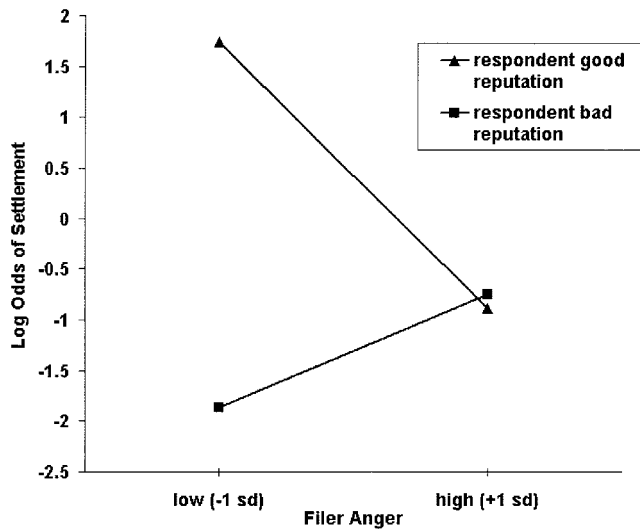


Figure 3. Interaction effects.

the claim, disputants may suggest or just even hint at what would be a satisfactory settlement.

### Conclusion

This study provides insights into the relationships between emotion, resolution focus, reputation, and the settlement of disputes. These results seem likely to generalize from the online asynchronous to the face-to-face environment. Disputants who control their anger and who focus on resolution are more likely to reach a settlement. Just as important, which approach is taken tends to be shaped by the context, including reputations and the size of the stakes in mediation.

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Received January 11, 2003

Revision received May 29, 2003

Accepted June 17, 2003 ■

## Appendix

### Excerpts From the Communication of Disputants That Were Coded as “Resolution Focus”

“I am willing to give a full refund. Needs to strike out all negative refs to me and then all will be okay.. 1 star review is okay as well”

“I will give her a full refund if she takes the bad feedback off, that's the only way I will hgive her a full refund”

“I told her that I would be willing to do a partial refund since she is not happy.”

“Now I am willing to send my payment for the item plus eBay fees to the seller, but I am not willing to pay for such high expenses for mail shipment.”

“Like I stated, I will refund all of their money including shipping as soon as I get the [item] back.”

Note. Spelling, grammar, and punctuation left uncorrected.