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DOI
10.1002/bdm.2079

Publication date
2018

Document Version
Final published version

Published in
Journal of Behavioral Decision Making

Received: 7 July 2017 | Revised: 18 January 2018 | Accepted: 18 January 2018

DOI: 10.1002/bdm.2079

RESEARCH ARTICLE

WILEY

Communication of anger versus disappointment in bargaining and the moderating role of power

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Abstract

Emotional expressions can have a pervasive impact on bargaining behavior and outcomes. This widely documented phenomenon implies that in their communications, bargainers may adjust their apparent emotions. In the current paper, we developed a paradigm to study the communication of anger and disappointment, two of the most commonly experienced emotions in bargaining. The results of three experiments show that bargainers often adjust the intensity of their emotions in their communicated emotions. The findings show a differentiated pattern, revealing that bargainers rather exaggerate their disappointment than their anger, especially when the target of their communication is in a high power position. The results are discussed and related to the social functional approach of emotions.

KEYWORDS

bargaining, communication, emotions, power

1 | INTRODUCTION

Many decisions and transactions involve bargaining. Employers negotiate with employees on the terms of employment, firms bargain over the selling prices of their commodities, and in the consumer domain, products (housing, automobiles, and electronics) are often bought and sold on the basis of a bargaining process. It is therefore important to understand how bargainers influence the outcome of the process. In the current article, we draw attention to the communication of emotions in this process.

Bargaining can be described as "the process whereby two or more parties attempt to settle what each shall give and take, or perform and receive, in a transaction between them" (Rubin & Brown, 1975, p. 2). This description implicitly captures the fact that bargaining is a mixed-motive situation where bargainers on the one hand need each other but on the other hand strive to obtain a good deal for themselves (Komorita & Parks, 1995; Pruitt & Carnevale, 1993). Bargaining is often a highly emotional and heated process (Barry & Oliver, 1996; Van Kleef & Côté, 2018). Bargainers may, for example, become angry (e.g., Pillutla & Murnighan, 1996; Xiao & Houser, 2005; Yamagishi et al., 2009) or disappointed (e.g., Lelieveld, Van Dijk, Van Beest, Steinel, & Van Kleef, 2011) when the give-and-take process does not go to their liking and they face the negative prospect of ending up with low outcomes.

Importantly, research has shown that bargainers may adjust the intensity of their emotions when communicating to their opponent. Of particular interest is an experimental study by Andrade and Ho (2009), who developed a two-person bargaining paradigm in which they first presented participants with an unfair allocation in which their opponent had allocated the bulk of the outcomes to himself or herself and only a small portion to the participant. Participants were asked to indicate (on a 101-point scale; running from 0 to 100) how angry they felt about this allocation. After that, they learned that they would play a bargaining game with the same opponent. At that point, they were asked again to indicate how angry they had been over the previous distribution (again on a 101-point scale), but now, participants learned that their reactions would be sent to their opponent, who would then subsequently make his or her final offer in the bargaining game. The results indicated that at that point, participants exaggerated their anger, communicating higher levels of anger to their opponent than they had actually experienced. The authors described and interpreted this exaggeration of anger as a bargaining strategy that participants used in their striving for a better deal, concluding that participants were "gaming" their anger.

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2 | GAMING EMOTIONS WHEN COMMUNICATING ANGER IS RISKY

The notion of "gaming anger" and the exaggeration that Andrade and Ho (2009) observed fit with the notion that communicating high levels of anger may be to a bargainer's advantage. Indeed, several lines of research have demonstrated the potential benefits of communicating (high levels of) anger. In particular, research has shown that bargainers often give in to those who communicate anger (e.g., Van Kleef, De Dreu, & Manstead, 2004a, 2004b), a process that appears to be driven by fear of impasse (e.g., Lelieveld, Van Dijk, Van Beest, & Van Kleef, 2012; Van Dijk, Van Kleef, Steinel, & Van Beest, 2008).

Communicating high levels of anger is not without risk, however, as it can also undermine the likelihood of reaching an agreement (Friedman et al., 2004; Kopelman, Rosette, & Thompson, 2006). Particularly relevant for our current purposes is a study by Van Dijk et al. (2008), who manipulated power in an ultimatum bargaining game setting by varying the consequences of rejection. In the typical ultimatum bargaining game (Güth, Schmittberger, & Schwarze, 1982), the consequences of having one's offer rejected are quite severe for the allocator (i.e., both parties end up with zero outcomes). Extending the classic version of the paradigm, Van Dijk and colleagues also included a condition in which the consequences of rejection were quite low (i.e., by rejecting an offer, recipients could only marginally reduce the outcomes of the allocator). Under these circumstances, recipients who communicated anger did not receive higher offers but received low (unfair) offers instead.

This negative effect of communicating anger was explained by the observation that by communicating anger, bargainers may also anger their opponent. For those in a low power position, this is a bad idea: Angered opponents may make low offers, if they know that the consequences of having their offer rejected are low. In other words, communicating anger in a low power position is unlikely to be effective (Overbeck, Neale, & Govan, 2010; Sinaceur & Tiedens, 2006; Van Kleef et al., 2004b). In fact, several studies indicate that communicating anger in a low power position can backfire, for instance, because opponents make tougher instead of more lenient demands (Lelieveld et al., 2012; van Kleef & Côté, 2007) or because they sabotage the angry partner later on in unrelated situations (Wang, Northcraft, & Van Kleef, 2012).

Taken together, these findings suggest that communicating high levels of anger may not always be an effective strategy and at times even counter-effective. So what to do if you fear that communicating high levels of anger may not be wise for you? One could argue that the rational thing to do would then be to communicate low levels of anger. Downplaying anger is a well-known strategy, which is often described in terms of anger regulation (e.g., Gibson & Callister, 2010). But in bargaining contexts, this may not always be a wise strategy either. Consider again the bargaining context of Andrade and Ho (2009): What message do you effectively communicate to the allocator if you express low levels of anger upon receiving an unfair outcome? One could argue that such a strategy might be seen as an invitation to further exploitation: If you tell me that you are not angry after receiving a low outcome, why should I make you a high(er) offer?

Critically, the reasoning that low levels of anger may invite exploitation is only valid if—as in the Andrade and Ho (2009) study—one does not have any other means at one's disposal than communicating anger. But what would happen if one would have a viable alternative to get one's message across? While anger is recognized as being a typical reaction to unfair allocations (Pillutla & Murnighan, 1996; see also Seip, Van Dijk, & Rotteveel, 2014; Sanfey, Rilling, Aronson, Nystrom, & Cohen, 2003), it should be noted that in bargaining contexts, research has also identified alternative emotions to signal discontent with low offers. In particular, research has studied the interpersonal effects of communicating disappointment.

Next to anger, disappointment is considered a highly prevalent negative emotion in bargaining settings (e.g., Lelieveld, Van Dijk, Van Beest, & Van Kleef, 2013). The difference with anger is that it is less confrontational. Disappointment has even been described as serving a "supplication" function (e.g., Van Kleef, De Dreu, & Manstead, 2006). Disappointment may thus serve as a negative signal, just like anger, but "without communicating a prospect of retaliation, as anger does" (Wubben, De Cremer, & Van Dijk, 2009, p. 988). By communicating disappointment, one thus signals that one is dissatisfied with how things are going (i.e., in bargaining, it can signal that one feels the opponent's offer is too low) without risking being perceived as hostile and inviting retaliation. This may be an effective strategy inducing higher offers because disappointment may induce guilt and evoke a willingness to help (see Lelieveld et al., 2011, 2012, 2013; also see Klapwijk et al., 2016; Klapwijk, Peters, Vermeiren, & Lelieveld, 2013).

Disappointment may thus constitute an effective means next to—or maybe even instead of—anger. Indeed, Van Kleef et al. (2006; see also Van Kleef & Van Lange, 2008) showed that communicating disappointment may be an effective strategy in bargaining and even more effective than anger. Follow-up research showed that this may especially be the case for those in low power positions (Lelieveld et al., 2012).

It should be noted that the research discussed above has focused on the *effectiveness* of emotional communication in bargaining. In these studies, participants reacted to (preprogrammed) communications of anger versus disappointment in a bargaining setting. These studies did not assess the willingness to actually *communicate* anger versus disappointment. The field is thus still in the dark on whether bargainers would prefer to use (and exaggerate) disappointment rather than anger and whether and how this preference might be modulated by power.

3 | THE CURRENT STUDIES

Our experiments are based on, but in some features different from, Andrade and Ho's (2009) study on gaming emotions in bargaining. Andrade and Ho first presented their participants with a dictator game in which they were disadvantaged before they entered a negotiation. Anger was assessed by first measuring the immediate reaction of the participants to the dictator game allocation. It was only after this that participants entered an ultimatum bargaining game with their opponent. In that bargaining setting, they could inform their opponent about their anger about the opponent's behavior in the prior dictator setting.

For the current purposes, we made a few changes to this procedure. First, we set out to assess the communication of emotions within the bargaining setting. Within the ultimatum bargaining setting, participants thus first received an unfair offer, after which we assessed their emotional reactions to that offer. Subsequently, we also asked them to communicate their emotions to their opponent, while being informed that after this, their opponent would formulate his or her final (ultimatum) offer. We thus created a situation in which the first offer was already situated in a bargaining context.

Second, we also included the option to communicate disappointment. Thus, we measured both how angry and how disappointed participants felt after receiving the low initial offer from the opponent, and we assessed to what extent they subsequently communicated anger as well as disappointment to their opponent. Instead of restricting the experience and communication to one emotion only, we thus broadened the scope of the communication repertoire.

Third, we explicitly considered power differences between the bargainers. This enabled us to examine whether power differentials modulate the communication of anger versus disappointment in bargaining, as suggested by our foregoing reasoning.

In Experiments 1 and 2, we kept the power difference constant. In these experiments, we compared participants' reports on their immediate emotional reactions (anger/disappointment) to the offer with the emotions (anger/disappointment) they subsequently communicated to their opponent. In Experiment 3, we made a paradigmatic adaption to the ultimatum game setting that allowed us to manipulate the participants' relative power position.

4 | EXPERIMENT 1

In Experiment 1, we used our paradigm to test whether bargainers differentiate in their communication and misrepresentation of disappointment and anger. Andrade and Ho (2009) found that in a setting in which only anger could be communicated, bargainers exaggerated their anger. The current setting, which allows participants to communicate anger as well as disappointment, enables us to see whether (some) participants might rather exaggerate their disappointment than their anger. Would the findings of Andrade and Ho replicate under these conditions? We did expect that bargainers would want to signal their discontent. Exaggerating their negative emotions, as observed by Andrade and Ho, would be a viable option, but we anticipate that at least some would rather do this by exaggerating their disappointment than by exaggerating their anger. Put differently, (at least some) bargainers might rather exaggerate the less confrontational emotion of disappointment (the option that was not available in the Andrade and Ho study) than communicate high levels of anger.

4.1 | Method

4.1.1 | Design and participants

The participants, 39 students[1] (8 males, 31 females; mean age = 20.90 years; *SD* = 3.19) at Leiden University, participated voluntarily. Report (experienced vs. communicated) and Type of Emotion (anger vs. disappointment) were assessed as within-participants measures.

4.2 | Procedure

At the start of the instructions, the participants were informed that they would participate in a study on bargaining and that they would be paired with one of the other participants.[2] Members of each dyad would be referred to as persons X and Y. All participants learned that they were assigned the letter Y.

Participants then received the explanation of the ultimatum bargaining situation. The participants learned that they, Y, would bargain with X over the distribution of 100 chips, with each chip representing 10 cents. In all conditions, participants learned that X would make them an offer for the distribution of the chips. If they would accept the offer, the chips would be divided accordingly. If they would reject the offer, neither they nor X would receive any chips.

After this explanation, participants were asked a few questions to ensure comprehension of the main characteristics of the setting. We asked them whether they were X or Y and what the consequences would be if they rejected the offer. After answering a question, the correct answer was disclosed.

Subsequently, participants waited for the offer of X. After some time, the offer was displayed: X offered to keep 80 chips and allocate 20 chips to the participant. Immediately after this, we asked participants to indicate their reactions to the offer, which they provided by clicking on two separate lines (visual analogue scales) representing their experienced anger and disappointment. These scales were similar to the one used by Andrade and Ho (2009). The exact place where participants clicked was scaled as a response between 0 (if they clicked on the extreme left side of the line) and 100 (if they clicked on the extreme right side of the line). Only the endpoints of the lines were labeled; the labels for the two scales were "*not angry at all*" and "*very angry*" (anger scale) and "*not disappointed at all*" and "*very disappointed*" (disappointment scale). In the following, we refer to these measurements as "experienced anger" and "experienced disappointment" (terms we deliberately avoided in our instructions to the participants). Note that at this point, participants did not anticipate that their responses would be sent to their opponent.

After participants had indicated their experienced emotions, we informed them that they could communicate to X how they felt about the offer. For this purpose, participants were presented with the same emotion scales, but now, they learned that their answers would be sent to X (as in Andrade & Ho, 2009). We did not encourage participants in any way to adjust their emotions in their communication. Participants only learned that after reading their responses, X would have the opportunity to change his or her offer. This time, however, the offer

[1] In all studies, we collected data from more than 35 participants per cell (which exceeded the recommendations put forward by Simmons, Nelson, & Simonsohn, 2011 at the time of data collection).

[2] We report the dependent measures that are most central to our reasoning: the checks on the manipulations, main dependent measures, and main motives. For exploratory purposes, we also collected additional data on individual differences in social value orientations, perspective-taking, empathic concern, and self-reported emotional intelligence (all taken prior to the experiments). These data are available upon request.

would be final. In the following, we refer to these measurements as "communicated anger" and "communicated disappointment" (again, we never used these terms in the instructions to the participants). After collection of the main data pertaining to experienced and communicated emotions, all participants received feedback that X had decided not to change the offer. After answering some exploratory questions (e.g., on motivations for sending information; available upon request), participants were thoroughly debriefed, and they received 3 euros. All participants agreed to this procedure.

4.3 | Results

4.3.1 | Reported emotions

For each participant, we obtained two reports of their emotions: the experienced emotion and the communicated emotion. By treating these measures as the two levels of a within-participants variable "report," we could analyze whether both measures differed. Because we could make this comparison both for disappointment and anger, we also created the within-participants variable "type of emotion."

A 2 (report: experienced vs. communicated) × 2 (type of emotion: anger vs. disappointment) repeated measures analysis yielded main effects for report, $F(1, 38) = 5.97$, $p = .019$, $\eta^2_p = .14$, and type of emotion, $F(1, 38) = 40.74$, $p < .001$, $\eta^2_p = .52$. The main effect of type of emotion showed that participants reported higher levels of disappointment ($M = 66.81$; $SD = 22.12$) than of anger ($M = 38.67$; $SD = 22.78$). The main effect of report showed that participants communicated higher levels of their emotions ($M = 55.81$; $SD = 20.15$) than they had experienced ($M = 49.67$; $SD = 18.62$). These effects were qualified by a significant Report × Type of Emotion interaction, $F(1, 38) = 15.87$, $p < .001$, $\eta^2_p = .30$. The relevant means are displayed in Table 1. As the table shows, it was only for disappointment that participants reported a significantly higher level to their opponent than they had experienced, $t(38) = 4.03$, $p < .001$. For anger, no such exaggeration was observed, $t(38) = 0.72$, $p = .47$.

4.4 | Additional analyses

4.4.1 | Absolute versus nonabsolute differences

On the basis of the findings of the repeated measures analyses alone, one might conclude that participants did not really adjust their anger, as the mean intensity of communicated anger was not significantly different from the mean intensity of experienced anger. To illustrate this further, we computed a difference score by subtracting the experienced emotion from the communicated emotion (both on the 101-point scales), such that positive scores reveal exaggeration and negative scores reveal downplaying of the emotion. Consistent with the repeated measures analyses presented above, this difference was significantly smaller for anger ($M_{\text{nonabsolute difference}} = -2.10$; $SD = 18.14$) than for disappointment ($M_{\text{nonabsolute difference}} = 14.38$; $SD = 22.32$); $t(38) = -3.98$, $p < .001$. Moreover, as observed above, the mean difference only differed significantly from zero in the case of disappointment, $t(38) = 4.03$, $p < .001$; for anger, $t(38) = -0.72$, $p = .47$.

TABLE 1 Experienced and communicated anger and disappointment, Experiment 1

	Experienced	Communicated
Anger	39.72 (23.14)[a]	37.62 (25.83)[a]
Disappointment	59.62 (43.50)[a]	74.00 (23.45)[b]

Note. Standard deviations are between brackets. Per row, means with a different superscript differ significantly (*t*-tests, $p < .05$).

Note, however, that similar means for experienced and communicated emotions do not necessarily reflect little gaming of emotions. After all, it may well be that some people adjust their emotions by increasing the emotional intensity in their communication to their opponent (i.e., by exaggerating the emotion), whereas others adjust their emotions by decreasing the emotional intensity (i.e., by downplaying the emotion). Similar means may thus be the result of no gaming but may also reflect more differentiated gaming (gaming in opposite directions). To gain more insight into whether or not participants had adjusted their emotions, we therefore also analyzed and compared the *absolute* differences between experienced emotions and communicated emotions. This way, we captured adjustment irrespective of whether it involved exaggeration or downplaying. Both strategies are now identified as a case of adjustment, with higher absolute scores denoting more adjustment. We computed and analyzed the absolute difference scores both for anger and disappointment. Interestingly, this analysis showed that the absolute differences were similar for anger and disappointment, $M_{\text{anger}} = 13.08$, $SD = 12.57$; $M_{\text{disappointment}} = 17.62$, $SD = 17.62$; $t(38) = -1.44$, $p = .16$, suggesting that participants did not differ significantly in the extent to which they gamed disappointment and anger. Both measures differed significantly from zero for disappointment, $t(38) = 5.56$, $p < .001$; for anger, $t(38) = 6.50$, $p < .001$. In other words, this analysis shows that participants were equally likely to adjust their anger as they were to adjust their disappointment—an interpretation that differs from the conclusion one might be tempted to draw if one would only consider the nonabsolute differences.

Note that if we compare these absolute differences to the nonabsolute differences, both measures are fairly similar for disappointment ($M_{\text{nonabsolute difference}} = 14.83$; $M_{\text{absolute difference}} = 17.62$). However, for anger, we see a striking difference ($M_{\text{nonabsolute difference}} = -2.10$; $M_{\text{absolute difference}} = 13.08$).[3] The fact that for anger the absolute differences were much higher than the nonabsolute differences suggests that the participants showed differentiation in their communication of anger: Some increased the intensity of the anger in their communication, whereas others decreased it.

4.4.2 | Correlations between nonabsolute differences for anger and disappointment

As a final exploration, we examined the correlations between the nonabsolute differences for anger and the nonabsolute differences for disappointment. In particular, we explored whether correlations between these measures would differ for those who downplayed their anger and those who exaggerated their anger. We anticipated that for those who increased their anger, we might find an increase in disappointment as well. After all, it makes little sense to say that you are

[3]We refrained from statistically comparing the nonabsolute differences with the absolute differences, because both measures are based on the same underlying data (i.e., they are interdependent).

very angry but not very disappointed. For those who downplayed their anger, we anticipated a different pattern, because it can make sense to signal a low level of anger while at the same time coupling this with a high level of disappointment. Inspection of the correlations corroborated this view: For those who had increased their anger (n = 19), we observed a significant and positive correlation (r = .61, p = .005), implying that those who exaggerated their anger generally also exaggerated their disappointment. For those who decreased their anger (n = 19), we observed a negative but nonsignificant correlation (r = −.07, p = .77), implying that those who downplayed their anger did not opt for a similar downplaying strategy for disappointment.[4]

4.5 | Discussion

The results of our first study support the notion that people adjust the emotions they communicate in bargaining. Moreover, our participants seemed to have a greater uniform preference for exaggerating their disappointment than for exaggerating their anger. In this respect, our findings differed from Andrade and Ho's (2009) study on anger communication, which revealed general exaggeration of anger. As we noted in Section 1, an important difference between the respective paradigms is that we provided our participants with two options: They could communicate anger and disappointment. If the only option bargainers have is to communicate anger—as was the case in the Andrade and Ho study—people may very well feel that if they would communicate low levels of anger, their opponent may conclude that it is acceptable to make low offers. In other words, if one only has anger available as a means to signal discontent, this constraint may invite exaggeration. This may be so even if one considers exaggerating anger a risky option, because downplaying (or not exaggerating) anger is risky as well (i.e., it may invite exploitation).

It seems that having an alternative means to signal disapproval of the offer (i.e., by communicating disappointment) tempered the willingness to communicate (or at least tempered the willingness to exaggerate) anger. Interestingly, our exploration of the correlations supports such a signaling explanation by showing that the downplaying of anger was not accompanied by a similar downplaying of disappointment. Although participants who exaggerated their anger also tended to exaggerate their disappointment (as indicated by a strong positive correlation), this relation did not hold for those who downplayed anger.

The suggestion that the communication of anger may partly be dependent on the alternative options one has to signal one's discontent (e.g., by communicating disappointment) raises the interesting question of whether paradigmatic differences (i.e., constraints in the emotion communication options) may be partly responsible for the observed difference in the use of anger between our study and the study by Andrade and Ho (2009). This issue moves beyond "just" being a paradigmatic puzzle that begs to be solved. Crucially, the issue revolves around the signaling function of emotions (see Keltner & Haidt, 1999; Van Kleef, 2016) and the repertoire of emotions bargainers have at their disposal when communicating. Having the choice to signal disappointment while at the same time being able to signal anger introduces new possibilities. For one thing, it offers the possibility to send the signal "I am not angry, but I am disappointed," which sends a clearly different message than only communicating "I am not angry." In terms of the social functional approach to emotions, the interpersonal effects of both messages could thus be entirely different.

5 | EXPERIMENT 2

To see whether constraints in options for communication indeed affect communicated levels of emotions, we designed a study in which we compared the setting we developed in Experiment 1—where people could both communicate their anger and disappointment—with a setup that resembled Andrade and Ho's (2009) setup wherein bargainers were confined to communicating only one emotion. Being interested in the communication of not only anger (cf. Andrade & Ho) but also disappointment, we created two such conditions: one in which participants could only communicate anger and one in which they could only communicate disappointment.

Our general prediction was that in a constrained communication setting, participants more uniformly exaggerate their emotions (i.e., disappointment or anger) because that would be their only possibility to ventilate their discontent with the offer and thus their only means to strive for a better offer. If one wants a better offer, it does not make sense to communicate that one is not angry, or that one is not disappointed, so the only way may be to communicate one's negative emotion, or even to exaggerate it (as in the Andrade & Ho, 2009 study). If communication of both emotions is allowed, we do expect to replicate the pattern we observed in Experiment 1 (i.e., exaggeration of disappointment rather than anger).

5.1 | Method

5.1.1 | Design and participants

The participants, 106 students (31 males, 75 females; mean age = 21.16 years; SD = 3.13) at Leiden University, participated voluntarily. Participants were randomly assigned to one of the three between-participants conditions: the disappointment-only condition, the anger-only condition, and the anger + disappointment condition.

5.2 | Procedure

The procedure resembled the setup of Experiment 1 with regard to the role (all participants were in the recipient role, person Y) and the received offers (all participants received an 80–20 offer). Moreover, like in Experiment 1, participants were first asked to give their immediate emotional reactions for both disappointment and anger (on 0–100 scales, as before). As in Experiment 1, they then learned that they could communicate to their opponent before they would receive the final offer (again, on 0–100 scales). The difference with Experiment 1 concerned what participants could communicate to their opponent. In the disappointment-only condition, they could only indicate how disappointed they were. In the anger-only condition, they could only

[4]A Fisher r-to-z transformation indicated that both correlations differed significantly (z = 2.21, p = .027). Also note that one participant reported exactly the same level of anger in the first reaction as in the communication to the opponent; this participant was not included in this analysis.

indicate how angry they were. In the anger + disappointment condition—like in Experiment 1—participants could communicate their emotions on two scales.

5.3 | Results

5.3.1 | Reported emotions

Because we only had the measure for communicated disappointment in the disappointment-only condition, and only the measure for communicated anger in the anger-only condition, we could not compare all three conditions within a single analysis. We therefore present two separate analyses. First, we focus on communicated versus experienced anger. For that purpose, we compared the anger ratings in the anger-only condition with the anger ratings in the anger + disappointment condition. Second, we present an analysis in which we focus on communicated versus experienced disappointment. For that purpose, we compared the disappointment ratings in the disappointment-only condition with the disappointment ratings in the anger + disappointment condition.

5.3.2 | Anger

We compared the experienced and communicated anger for the anger-only condition and disappointment + anger condition in a 2 (condition: anger-only vs. anger + disappointment) × 2 (report: experienced vs. communicated anger) analysis, with within-participant measures on the last variable. This analysis yielded a main effect of report, $F(1, 68) = 17.21$, $p < .001$; $\eta^2_p = .20$, qualified by a significant Condition × Report interaction, $F(1, 68) = 5.15$, $p = .026$; $\eta^2_p = .07$. The relevant means are presented in Table 2. As the table shows, participants on average increased their anger ratings in their communication to the allocator when this was the only emotion they could communicate (i.e., in the anger-only condition; $t(33) = 3.99$, $p < .001$). However, if they could also communicate disappointment (i.e., in the anger + disappointment condition), they did not significantly increase their ratings of anger, $t(35) = 1.55$, $p = .13$.

5.3.3 | Disappointment

We compared the experienced and communicated disappointment in the communicate disappointment-only condition and the communicate disappointment + anger condition. For this purpose, we conducted a 2 (condition: disappointment-only vs. anger + disappointment) × 2 (report: experienced vs. communicated disappointment) analysis, with within-participant measures on the last variable. This analysis only yielded a main effect of report, $F(1, 70) = 41.83$, $p < .001$; $\eta^2_p = .37$, indicating that participants communicated a higher level of disappointment ($M = 72.58$; $SD = 23.60$) than they had experienced ($M = 57.00$; $SD = 25.58$), irrespective of whether they could only communicate disappointment or whether they could communicate both anger and disappointment. See Table 3 for the relevant means per condition.

TABLE 2 Experienced and communicated anger in the anger-only and the anger + disappointment condition, Experiment 2

	Experienced anger	Communicated anger
Anger-only	43.50 (29.01)[a]	64.18 (22.97)[b]
Anger + disappointment	38.08 (27.73)[a]	44.14 (29.16)[a]

Note. Standard deviations are between brackets. Per row, means with a different superscript differ significantly (*t*-tests, $p < .05$).

5.4 | Additional analyses

5.4.1 | Absolute differences

We again analyzed the absolute differences, because—as Experiment 1 showed—a lower mean difference between the emotions people communicate and the emotions they experience does not necessarily imply less adjustment of emotions.

5.4.2 | Anger

A *t*-test on the absolute difference between reported and experienced anger indicated that the absolute difference was higher in the anger-only condition ($M = 27.15$; $SD = 24.40$) than in the anger + disappointment condition, $M = 14.44$; $SD = 19.28$; $t(62.80) = 2.41$, $p = .019$. In other words, there was more adjustment of anger when participants could only communicate their anger.

5.4.3 | Disappointment

A *t*-test on the absolute difference between reported and experienced disappointment indicated that the absolute difference was not significantly different for the disappointment-only condition ($M = 20.33$; $SD = 18.76$) and the anger + disappointment condition, $M = 16.83$; $SD = 16.42$; $t(70) = 0.842$, $p = .40$. Thus, the communication and adjustment of disappointment was not affected by whether or not communication was restricted to disappointment only.

5.5 | Replicating Experiment 1

The anger + disappointment condition was identical to Experiment 1, allowing for a direct (within participants) comparison of anger and disappointment reports. To examine whether the findings of Experiment 1 replicate, we again conducted, for this condition only, a 2 (report: experienced vs. communicated) × 2 (type of emotion: anger vs. disappointment) repeated measures analysis. The results closely resembled the findings of Experiment 1. We again observed main effects for type of emotion, $F(1, 35) = 27.31$, $p < .001$; $\eta^2_p = .44$, and report, $F(1, 35) = 11.71$, $p = .002$, $\eta^2_p = .25$. Moreover, these main effects were again qualified by a significant Report × Type of Emotion interaction, $F(1, 35) = 4.92$, $p = .033$; $\eta^2_p = .12$. As Table 4 shows, on average, participants exaggerated their level of disappointment in their communication to their opponent, whereas no significant exaggeration (or downplaying) was observed for anger.

TABLE 3 Experienced and communicated disappointment in the disappointment-only and the anger + disappointment condition, Experiment 2

	Experienced disappointment	Communicated disappointment
Disappointment-only	55.53 (25.96)[a]	72.31 (20.17)[b]
Anger + disappointment	58.47 (25.48)[a]	72.86 (26.88)[b]

Note. Standard deviations are between brackets. Per row, means with a different superscript differ significantly (*t*-tests, $p < .05$).

TABLE 4 Replicating Experiment 1: Experienced and communicated anger and disappointment in the anger + disappointment condition, Experiment 2

	Experienced	Communicated
Anger	38.08 (27.73)[a]	44.14 (29.16)[a]
Disappointment	58.47 (25.48)[a]	72.86 (26.88)[b]

Note. For the sake of clarity, we present these means in a separate table; the means can also be derived by combining the lower rows of Tables 2 and 3. Standard deviations are between brackets. Per row, means with a different superscript differ significantly (*t*-tests, $p < .05$).

If we also consider the absolute differences (see analyses above), it again becomes clear that it is not the case that participants did not adjust their anger. If we compare the absolute differences with the nonabsolute differences, we again see, as in Experiment 1, that both measures are fairly similar for disappointment ($M_{\text{nonabsolute difference}} = 14.39$; $M_{\text{absolute difference}} = 16.83$), whereas for anger, we observe a more pronounced difference ($M_{\text{nonabsolute difference}} = 6.06$; $M_{\text{absolute difference}} = 14.44$).[5] The fact that for anger, the absolute differences were much higher than the nonabsolute differences again indicates that the participants used a much more differentiated strategy when communicating anger: Some increased the intensity of the anger in their communication, whereas others decreased the intensity of their anger.

5.5.1 | Correlations between nonabsolute differences of anger and disappointment

As in Experiment 1, we explored the correlations between the nonabsolute differences of anger and disappointment. Here too, we observed a similar pattern as in Experiment 1: We again obtained a significant positive correlation for those who exaggerated their anger ($n = 20$, $r = .45$, $p = .045$) and not for those who downplayed their anger ($n = 12$, $r = .17$, $p = .61$), although this time the difference in correlations was not significant.[6]

5.6 | Discussion

The results of Experiment 2 are important for several reasons. First of all, we replicated the findings of Andrade and Ho (2009) in the condition where participants could only communicate how angry they were (just like in Andrae & Ho's study): In this condition, participants exaggerated their anger in their communication. A similar pattern is evident when we consider the condition where participants could only communicate their disappointment: Participants exaggerated their disappointment.

[5]As in Experiment 1, we refrain from conducting a statistical test to compare nonabsolute differences with absolute differences, because these measures are based on the same underlying data and are thus interdependent.

[6]Four participants communicated the same level of anger as they had experienced (i.e., neither exaggerated nor downplayed their anger); these are excluded from these correlational analyses in which we compared those who exaggerated their anger to those who downplayed their anger. Although the pattern of correlations replicates the pattern observed in Experiment 1, some caution for interpretation is warranted because the correlation for those who downplayed was based on only 12 participants (i.e., the number of participants downplaying their anger was a bit lower than in Experiment 1). A Fisher *r*-to-*z* transformation indicated that both correlations did not differ significantly ($z = 0.78$, $p = .435$).

Importantly, we also replicated the findings of Experiment 1 in the replication cell of Experiment 1, that is, the condition in which participants could communicate both anger and disappointment. In this condition, participants on average exaggerated their disappointment in the communication to their opponent but not their anger. Moreover, the subsequent analyses on the absolute difference measures reveal that it was (again) not the case that participants were not gaming their anger. Rather, the participants seemed mixed in their communications in the sense that they did adjust their emotions but apparently some opted for downplaying, whereas others opted for exaggeration, so that on average, we did not observe exaggeration (or downplaying) of anger.

These findings fit with the idea that anger is like a double-edged sword: Communicating anger may pay by inducing others to concede (e.g., Sinaceur & Tiedens, 2006; Van Kleef et al., 2004a, 2004b) but may also backfire by inviting negative reactions (e.g., Allan & Gilbert, 2002; Kopelman et al., 2006; Kuppens, Van Mechelen, & Meulders, 2004; Van Beest, Van Kleef, & Van Dijk, 2008; Van Dijk et al., 2008; Van Kleef & Côté, 2007; Wang et al., 2012). Apparently, people differ in their anticipations of which of these edges is the sharpest. Moreover, when presented with the alternative option to signal disappointment, a considerable subset of the people opted for downplaying anger while still communicating high levels of disappointment.

In our final experiment, we followed up on this idea by studying power as a potential moderator that may affect to what extent people exaggerate their anger. We reasoned that anger communication would probably be related to whether people anticipate the expression of anger to pay off versus backfire. On the basis of previous research suggesting that it is not wise for people in low power positions to communicate anger (e.g., Lelieveld et al., 2012; Van Kleef & Côté, 2007), we manipulated power in Experiment 3, in a setting where participants could again communicate both anger and disappointment after receiving a low offer.

6 | EXPERIMENT 3

Experiment 3 included the main features of Experiments 1 and 2: Participants received a low offer, after which we (a) assessed their experienced anger and disappointment, and (b) asked them to communicate their anger and disappointment to their opponent. The main difference was that we now also manipulated the relative power position of the recipient, by manipulating the consequences of rejection of the offer. We varied the consequences of rejection with a manipulation developed by Fellner and Güth (2003). They introduced what they called "threat power" by varying the consequences of rejection in the ultimatum game. The only difference with the original ultimatum game is that after rejection, the outcomes for both bargainers are not zero. Instead, the offer is multiplied by a factor λ for the allocator and $(1 - \lambda)$ for the recipient (with $0 \leq \lambda \leq 1$). To illustrate, consider the case where, with \$10 to be divided, the allocator offers \$3 to the recipient and \$7 to himself or herself, and λ is set at 0.8. If the recipient accepts the offer, the outcomes are distributed accordingly (similar to the ultimatum game). However, if the recipient rejects, the outcomes for both bargainers become \$5.60 for the allocator (\$7 × 0.8) and \$0.60 for the

recipient ($3 × 0.2). In contrast, when λ is set at 0.2, the respective outcomes after rejection would be $1.40 for the allocator ($7 × 0.2) and $2.40 ($3 × 0.8) for the recipient. It is clear that with lower values for λ, the power advantage shifts to the recipient (Due to its reliance on λ, this version of the ultimatum game is sometimes referred to as the lambda game; for other studies using similar power manipulations, see e.g., Güth & Kovacs, 2001; Suleiman, 1996; Van Dijk & Vermunt, 2000).

In Experiment 3, we use this "λ induction" to study moderating effects of power on the use of emotions. Our main interest was to see whether the misrepresentation of anger would be moderated by power. Would the low power recipients indeed be the ones who would show restraint in their communication of anger and would exaggeration of anger be primarily observed among those with high power? Reasoning that disappointment is a less confrontational emotion, and thus an emotion with less of a negative edge, we did not expect strong moderation for that emotion.

6.1 | Method

6.1.1 | Design and participants

The participants, 80 students (42 males, 38 females; mean age = 21.89 years; *SD* = 3.92) at Leiden University, participated voluntarily. Participants were randomly assigned to one of the two between-participants conditions: low power versus high power.

6.2 | Procedure

The procedure resembled the setup of Experiments 1 and 2 with regard to the role (all participants were in the recipient role, person Y) and the exchange of offers (participants received an 80–20 offer). Moreover, like in Experiment 1 and its replication condition in Experiment 2, participants were first asked to report their experienced emotional reactions for both disappointment and anger (on 0–100 scales, as before) and then learned that they could communicate both emotions to their opponent before they would receive the final offer (again, on 0–100 scales). The difference was in the description of the bargaining setting. In the low power condition, participants learned that if they would reject the offer, the number of chips of the allocator (X) would be reduced by 10%, and their own outcome would be reduced by 90% (i.e., in terms of the lambda game, lambda was set at 0.9). In the high power condition, participants learned that if they would reject the offer, the proposed allocation of the allocator (X) would be reduced by 90%, and their own outcome would be reduced by 10% (i.e., lambda was set at 0.1).

To check our manipulation of power, we asked our participants three questions that were combined to form a reliable power scale (did you feel dependent on X? [1 = *absolutely not dependent*; 7 = *very dependent*]; how would you describe the position of X? [1 = *not powerful*; 7 = *very powerful*]; who is more powerful, X or you? [1 = *me*; 7 = *X*]; Cronbach's alpha = .88). Higher scores on this scale denote higher ascribed power to the opponent (X) and thus lower power for the participant.

6.3 | Results

6.3.1 | Manipulation check

A *t*-test on the power scale showed, as intended, that participants in the low power condition (*M* = 6.09; *SD* = 0.89) ascribed more relative power to their opponent than did participants in the high power condition, *M* = 3.47; *SD* = 1.53; $t(62.725) = 9.39$, $p < .001$. These findings suggest that our manipulation was successful.

6.3.2 | Reported emotions

A 2 (power: low vs. high) × 2 (type of emotion: anger vs. disappointment) × 2 (report: experienced vs. communicated) analysis of variance with repeated measures on the last two factors yielded a main effect of type of emotion, $F(1, 78) = 34.49$, $p < .001$; $\eta^2_p = .31$, indicating that participants reported higher levels of intensity for disappointment (*M* = 63.38; *SD* = 23.17) than for anger (*M* = 48.16; *SD* = 25.40). Importantly, we also observed significant two-way interactions between power and type of emotion, $F(1, 78) = 4.39$, $p = .039$, $\eta^2_p = .05$, and between report and type of emotion, $F(1, 78) = 10.81$, $p = .002$, $\eta^2_p = .12$, which were qualified by a three-way interaction, $F(1, 78) = 4.54$, $p = .036$; $\eta^2_p = .06$.

The means for the three-way interaction are displayed in Table 5. The most straightforward way to interpret this interaction is to compare low and high power participants (i.e., by considering the rows of Table 5). Such a comparison indicates that these groups only differed significantly in their communication of anger. High power participants did not differ significantly from low participants in terms of their experienced anger, $t(78) = 1.10$, $p = .27$, but they did in terms of their communicated anger: High power participants communicated higher levels of anger (*M* = 56.58) than did low power participants, *M* = 39.08; $t(74.672) = 2.59$, $p = .011$. Both groups did not differ significantly in their experience, $t(78) = 0.59$, $p = .56$, or communication, $t(78) = -0.14$, $p = .89$, of disappointment.

6.4 | Additional analyses

6.4.1 | Absolute versus nonabsolute differences

Again, it is informative to consider the absolute versus nonabsolute differences between communicated and experienced emotions. The nonabsolute differences (for which we do not present new statistical

TABLE 5 Experienced and communicated emotions, as a function of power, Experiment 3

	Anger		Disappointment	
	Experienced	Communicated	Experienced	Communicated
Low power	45.10 (27.49)[a]	39.08 (33.22)[a]	56.20 (28.87)[a]	69.25 (30.49)[a]
High power	51.90 (27.77)[a]	56.58 (26.81)[b]	59.65 (23.66)[a]	68.40 (25.32)[a]

Note. Standard deviations are between brackets. Per column, means with a different superscript differ significantly (*t*-tests, $p < .05$).

analyses because these would mainly echo what we already reported in the repeated measures analyses described above; the means can be derived from Table 5 by subtracting experienced emotions from communicated emotions), show positive differences for disappointment, regardless of the power position (low power $M_{\text{nonabsolute difference}}$ = 13.05; SD = 27.72; high power $M_{\text{nonabsolute difference}}$ = 8.75; SD = 29.43), implying general exaggeration of disappointment. For anger, we see a positive difference (i.e., exaggeration) for high power participants ($M_{\text{nonabsolute difference}}$ = 4.68; SD = 20.96) but a negative difference (i.e., downplaying) for low power participants ($M_{\text{nonabsolute difference}}$ = −6.03; SD = 33.26).

A 2 (power) × 2 (type of emotion) analysis of variance on the absolute differences yielded no significant effects (overall M = 20.01; SD = 27.28). We thus did not observe a difference in adjustment between emotions (i.e., participants did not, e.g., game more with disappointment than with anger); neither did low power and high power participants differ in the extent to which they adjusted their emotions. Again, the main difference appears to be in *how* people adjust their emotions, not in *whether* or to what extent they adjust their emotions.

6.4.2 | Correlations between nonabsolute differences for anger and disappointment

As in Experiments 1 and 2, we explored the correlations between the nonabsolute differences for anger and the nonabsolute differences for disappointment. We again observed a (now marginally) significant positive correlation for those who had exaggerated their anger (n = 42, r = .30, p = .053) and not for those who downplayed their anger (n = 36, r = .15, p = .37), although the difference in correlations was not significant.[7]

6.5 | Discussion

Replicating the findings of Experiments 1 and 2, we observed more differentiation in the adjustment of anger than of disappointment. Moreover, power moderated the directional use of emotions as a communication strategy. Participants generally exaggerated their disappointment, regardless of whether they faced a more powerful opponent (i.e., when they were in a relatively low power position themselves) or whether they faced a low power opponent (i.e., when they were in a relatively high power position themselves). The data tell a different story when it comes to communicating anger. In their communication of anger, low power participants clearly opted for a more cautious (downplaying) strategy than high power participants did.

[7]Even though the observed pattern is similar to the pattern observed in Experiments 1 and 2, we caution against overinterpretation. Two participants communicated exactly the same level of anger as they experienced; these were excluded from these correlational analyses in which we compared those who exaggerated their anger with those who downplayed their anger. While replicating the patterns of correlations, we observed in Experiments 1 and 2, a Fisher r-to-z transformation indicated that both correlations did not differ significantly (z = 0.72, p = .472).

7 | GENERAL DISCUSSION

Our research was inspired by Andrade and Ho's (2009) observation that bargainers exaggerate their anger when communicating to their opponent. Our current findings suggest that the strategies bargainers use are dependent on the available arsenal. We demonstrated that when bargainers can also communicate disappointment, they may prefer to communicate high levels of disappointment to communicating high levels of anger. Although our participants more or less uniformly exaggerated their disappointment, they were more diverse in their communications of anger. Some chose to exaggerate, whereas others chose to downplay their anger. Experiment 3 indicated that power plays an important role in shaping emotional communication. Although those in a relatively powerful position exaggerated their anger, those in a low power position tended to take the more cautious approach of downplaying their anger; a wise strategy if one considers the literature on the effects of showing anger towards high power or high status people (Allan & Gilbert, 2002; Kuppens et al., 2004; Sinaceur & Tiedens, 2006; Van Dijk et al., 2008; Van Kleef & Côté, 2007; Wang et al., 2012).

Note that the fact that we observed differentiated effects is informative about the underlying process. A general increase of intensity levels might be motivated by a concern to ensure that one's emotion is heard "loud and clear" and not lost in the noise. If this would be the main underlying process, one would expect such a process of exaggeration (or amplification) for both types of emotions, which is not what we observed. Moreover, one would not necessarily expect this process to be affected by power. The moderation we observed highlights the relevance of power for the communication of emotions. But, of course, we do not mean to imply that all differences in strategy can always (only) be traced back to power. The differentiated pattern we observed in Experiments 1 and 2, in which we did not manipulate power, may also partly be related to people's risk preferences (e.g., Mishra & Lalumière, 2011). Previous research by Cho and Lee (2006) in the consumer domain already showed that people with a low preference for risk may be more likely to opt for risk-reducing strategies, in their case by collecting additional information. In a similar vein, one might find that more risk-averse people are less willing to exaggerate their anger to obtain a better deal than more risk-prone people, with the former opting for the more cautious strategy of downplaying anger (and exaggerating disappointment). For future research, it may thus also be worthwhile to see how risk preferences may account for the strategies people use when gaming their emotions.

We were able to illuminate differential strategies in a setting that allowed for multiple emotion communications. Importantly, our studies showed that selected strategies highly depend on the communication repertoire. This was clearly shown in Experiment 2, where we compared our setting, which allowed for communication of both anger and disappointment, with a setting in which participants could only communicate anger (cf. Andrade & Ho, 2009) or only communicate disappointment. With only one option available, participants tended to exaggerate their negative emotion. However, when allowing for communication of both emotions, we saw a stronger preference for exaggerating disappointment rather than anger. These patterns fit the social functional approach of emotions because they can all be

explained by the signaling function that emotions have (see also Keltner & Haidt, 1999; Van Kleef, 2016). With only one option available, communicating low levels of either anger or disappointment does not function as a sign of discontent; that is, one cannot signal being unhappy about a low offer by saying that one is not angry, nor by saying that one is not disappointed. When one has the choice between communicating disappointment and communicating anger, communicating disappointment appears to be the preferred option (especially among low power bargainers), presumably because communicating disappointment signals discontent without aggravating one's counterpart.

Our findings align well with previous research on the effects of emotions. For example, previous research showed that communicating anger may not be effective in obtaining higher outcomes for those in low power positions (Sinaceur & Tiedens, 2006; Van Dijk et al., 2008; Van Kleef & Côté, 2007), and the current findings show that bargainers indeed (wisely) refrain from that confrontational tactic: They rather communicate high levels of disappointment. It would be interesting for future research to explore whether such correspondence is observed under other conditions as well. As a tentative example for such research, consider Dehghani, Carnevale, and Gratch (2014), who recently showed that expressions of anger may backfire in morally charged negotiations (see also Harinck & Van Kleef, 2012). Does this imply that people will indeed be restrictive in their communication of anger in morally charged communications (e.g., not to anger their opponent)? This might be the case, but at the same time, morally charged communications may trigger other (emotional) processes as well (e.g., moral outrage).

As is true for many studies in the decision-making domain, we did not explicitly ask our participants what went through their minds when making their decisions. In this respect, we relied on their actions, which could be seen as a limitation. In future research, one could also ask bargainers to formulate their expectations. We were reluctant to implement such a strategy in the current research because it could very well bias the responses. In particular, we reasoned that asking participants to explicitly report on the anticipated effects of their communications might invite more strategic behavior. Alternatively, it might restrict the participants if they would also have to formulate expectations regarding the effects of their communications. In any case, it would create new dynamics that do not necessarily provide a clearer picture or better insight. Note, however, that the participants' communicated emotions matched very well with what we know about the effectiveness of emotional communications in that participants made decisions that—based on what we know from studies on the effects of emotional expressions—could be expected to yield them the highest outcomes.

At this point, it is also good to consider other limitations, one of these being the way in which we studied the communication of emotions. Following Andrade and Ho's (2009) example, we used a fine-grained measure that allowed participants to indicate their emotions on 101-point scales. This allowed us to investigate the intensity levels of communicated emotions in a sensitive manner, thereby gaining good insight in the amount of adjustment. Of course, we realize that in real life settings, emotions are usually not communicated on 101-point scales. It would therefore be good for future research to also test alternative ways of expressing emotions (e.g., verbally or nonverbally by studying facial expressions). Related to this, the generalizability of our findings might be tested in less anonymous settings, such as conversations by telephone or email that allow for other types of communication (see, e.g., the emerging research on using emojis to communicate emotions in written texts; Glikson, Cheshin, & Van Kleef, in press; Kaye, Malone, & Wall, 2017). Van Kleef (2017) recently noted that interpersonal effects of emotions, including the signaling value of emotion communications, tend to be quite similar across expressive modalities. This would lead us to expect our findings to replicate in these settings as well. In addition, it would be interesting to study other research populations and, for example, see how experienced bargainers would use their emotions. Studies like these could further enrich the understanding of the role of emotions in bargaining.

The procedure of measuring emotions twice (once as private feelings and once as communications) proved to be very helpful in identifying strategies such as exaggerating or downplaying emotions. Nevertheless, it is important to also consider the possible effects of having two measurements. It is possible, for example, that the measure of communicated emotions was to some extent affected by the previously completed measure of experienced emotions. We could, for example, imagine that participants might feel somewhat bound by their first ratings (i.e., they might not want to adjust intensity levels in their communication). Note, however, that our main message is not about general levels of intensity. What our study shows is a difference in how bargainers use disappointment or anger. This is not merely a difference in intensity levels; it is a difference in communication strategy, with bargainers using generalized exaggeration of disappointment but a more differentiated strategy for anger (contingent on power): exaggeration when in a high power position and downplaying when in a low power position. It is difficult to envisage how such differentiation could be traced back to the fact that participants first reported "experienced emotions" before they indicated their "communicated emotions." Nevertheless, it may be an issue to include in future research (e.g., by including a condition in which experienced emotions are not assessed prior to communicated emotions).

Future studies could also incorporate other forms of power. In Study 3, we manipulated power by varying the consequences of rejection. One could, of course, also study inherent power differences between the two positions involved (allocator vs. recipient). Just turning the table to the allocator may not suffice, however. After all, in ultimatum games, it is not clear whether one should ascribe more power to the allocator or the recipient. One might be tempted to ascribe more power to the allocator (who gets to formulate the offer), but in a typical ultimatum game, the recipient holds considerable power as well. After all, if the recipient rejects, both end up with zero outcomes. An alternative way would be to keep the outcome structure intact but describe the roles in terms of different hierarchical positions. For example, one could describe the position of the participants as a leader/manager position or a subordinate position (see, e.g., Lammers, Galinsky, Gordijn, & Otten, 2012; Stamkou, Van Kleef, Fischer, & Kret, 2016). Moreover, an interesting but less controlled alternative would be to study actual power differences and their effects in field settings (see, e.g., Anderson, Keltner, & John, 2003).

A final note concerns the specificity of emotions. Our findings point to the value of studying the communication of specific emotions. The notion that it pays to "move beyond valence" (e.g., Lerner & Keltner, 2000) and, for example, distinguish between specific emotions has been well accepted. We suggest that it is now time to move beyond studying the *effects* of specific emotions by also considering the actual *use* of specific emotions in social communication, preferably in settings that allow for studying different emotions in concert. We focused on pitting anger against disappointment because in bargaining, these negatively valenced emotions have shown to be effective (and at times counterproductive), but there is no a priori reason to not expand these investigations to other negative emotions. Disgust may be one candidate, as research has shown that unequal offers may also evoke disgust (Chapman, Kim, Susskind, & Anderson, 2009), and disgust may be related to rejections (Moretti & Di Pellegrino, 2010). Interestingly, a recent study by Kupfer and Giner-Sorolla (2017) suggests that the social signaling function of disgust may be different from that of anger, in that disgust may—more than anger—advertise a moral position. Although anger is effective for signaling self-interest, disgust may be more useful for signaling unselfish moral concern. Moreover, it has been documented that disgust, unlike anger, does not prepare for aggressive acts (Roseman, Wiest, & Swartz, 1994). This might mean that under some circumstances (e.g., when being in a low power position), people would rather communicate disgust than anger. In a similar vein, our findings may encourage researchers to include other negative emotions (e.g., sadness, disgust, regret, and guilt) or even positive emotions (e.g., happiness, pride, and gratitude). It is our hope that future studies along these lines will lead to an even more comprehensive understanding of the crucial role of emotions in social decision-making.

AUTHOR CONTRIBUTION

Eric van Dijk and Ilja van Beest designed the studies; Ilja van Beest collected the data; statistical analyses were conducted by Ilja van Beest and Eric van Dijk; all authors contributed to the writing of the manuscript.

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How to cite this article: van Dijk E, van Beest I, van Kleef GA, Lelieveld G-J. Communication of anger versus disappointment in bargaining and the moderating role of power. *J Behav Dec Making*. 2018;31:632–643. https://doi.org/10.1002/bdm.2079