

## Get Angry, Get Out: The Interpersonal Effects of Anger Communication in Multiparty Negotiation

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## Accepted Manuscript

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Running Head: COMMUNICATING ANGER IN MULTIPARTY NEGOTIATION

Get Angry, Get Out:

The Interpersonal Effects of Anger Communication in Multiparty Negotiation

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## Abstract

Research on multiparty negotiation has investigated how parties form coalitions to secure payoffs but has not addressed how emotions may affect such coalition decisions. Extending research on bilateral negotiations which has generally argued that it is beneficial to communicate anger, we argue that it constitutes a considerable risk when there are more than two people present at the negotiation table. Using a computer mediated coalition game we show that communicating anger is a risky strategy in multiparty bargaining. The main findings of three studies were that participants (1) form negative impressions of players who communicate anger and therefore (2) exclude such players from coalitions and from obtaining a payoff share, but (3) make considerable concessions on those rare occasions that they choose to form a coalition with an angry player, or (4) when they had to form a coalition with an angry player. We discuss the implications of these results for theorizing on emotions, negotiations, and coalition formation.

Key words: multiparty negotiation, coalition formation, emotions, anger, exclusion

## Get Angry, Get Out:

## The Interpersonal Effects of Anger Communications in Multiparty Negotiation

Negotiation can be defined as a process in which two or more parties try to resolve a (perceived) divergence of interests by exchanging offers and counter offers (Pruitt & Carnevale, 2003; Lewicki, Saunders, & Barry, 2006). Interestingly, negotiation research tends to focus on situations in which only two people perceive divergent interest, ignoring small groups in which three or more individuals are in conflict. This lack of attention to multiparty negotiation is unfortunate because just introducing a third person to the negotiation table increases the complexity and social dynamics of the situation dramatically. When two individuals negotiate they may either reach an agreement or not. When three or more individuals negotiate, an agreement does not necessarily include all. Indeed, a major difference between bilateral and multilateral negotiations is that the latter allow the formation of coalitions.

Early theorizing about coalition formation has its roots in game theory, assuming that individuals are primarily motivated by self-interest (for a review of this approach see e.g., Kahan & Rapoport, 1984; Komorita, 1984; Komorita & Parks, 1995; Murnighan, 1978a). In line with this assumption one of the most replicated findings is that individuals rather share payoffs with few others in a small coalition than with many others in a large coalition. More recent theorizing has taken a different approach to study coalition formation. In contrast to comparing the predictive outcome of various coalition theories to the actual outcome of a coalition game, this approach is more focused at the underlying process by varying structural aspects of the situation (Polzer, Mannix, & Neale, 1998; Van Beest, Van Dijk, & Wilke, 2004a,b) and by stressing that individuals differ in what they value (Van Beest, Wilke, & Van Dijk, 2003; Van Beest, Van Dijk, De Dreu, & Wilke, 2005; Ten Velden, Beersma, & De Dreu, 2007). Adding to the assumption that people may be motivated by self-interest, this

line of research assumes that people are concerned how their actions affect the outcomes of those who are included and excluded from a deal (Van Beest & Van Dijk, 2007).

What is missing in both these coalition approaches is the observation of research on two-party bargaining (for reviews see Thompson, Medvec, Seiden & Kopelman, 2001; Van Kleef, Van Dijk, Steinel, Harinck, & Van Beest, 2008) that behavior is not only shaped by self-interest and/or concern for others, but also by emotions, and specifically by anger (Allred, 1999) that may be experienced (e.g., Hegtvedt & Killian, 1999; Pillutla & Murnighan, 1990) and communicated (e.g., Kopelman, Rosette, & Thompson, 2006; Sinaceur & Tiedens 2006; Van Kleef, De Dreu, & Manstead 2004a, 2004b; Van Kleef, De Dreu, Pietroni, & Manstead, 2006). This neglect of emotions in coalition research is rather surprising because research on social exclusion has shown that being excluded is a very negative experience leading to anger and even retaliation (e.g., Baumeister & Leary, 1995; Twenge, Baumeister, Tice, & Stucke, 2001; Van Beest & Williams, 2006; Williams, 2007; Zadro, Williams, & Richardson, 2004), suggesting that the communication of anger should be an important factor in multiparty bargaining. To advance theorizing on coalition formation we therefore set out to study the interpersonal effects of anger communication in a three-party negotiation setting.

### *Theoretical Background*

Our theoretical model is based on the social-functional account of emotions and its application in bilateral negotiations. The basic premise of this account is that emotions have important social functions and consequences (Frijda & Mesquita, 1994; Keltner & Haidt, 1999; Morris & Keltner, 2000; Oatley & Jenkins, 1992; Parkinson, 1996). For example, communicating anger may signal that someone's behavior is undesirable and that adjustment is needed (Averill, 1982). Note that we focus on *communicated* emotions. We thus do not

investigate whether negotiators are truly angry, but rather how communicating anger affects the outcomes of those who use such a strategy.

Demonstrating the pervasive effects of communicating anger, research on bilateral situations has on the one hand acknowledged that communicating anger has *negative consequences*. Individuals tend to form negative impressions of negotiators who communicate anger (Van Kleef et al., 2004a,b), may become angry themselves (Friedman et al., 2004; Van Kleef et al., 2004a), and may be unwilling to engage in future interactions with the opponent (Allred, 1997; Kopelman et al., 2006; Van Kleef et al., 2004b). However, regarding the financial consequences of communicating anger, this research has also stressed that communicating anger can have *positive consequences*. Provided that targets of anger communication do not have a high power position, several experiments have now shown that individuals yield to opponents who communicate anger, suggesting that communicating anger is a successful strategy to increase payoffs (Sinaceur & Tiedens, 2006; Van Dijk et al., in press; Van Kleef et al., 2004a,b; but see Kopelman et al., 2006). For example, Van Kleef et al. (2004a) provided participants with information about the opponent's emotional state during a computer-mediated negotiation. Results showed that negotiators who were confronted with an opponent who communicated anger developed negative impressions of the opponent, but nonetheless conceded to the other's anger to avoid costly impasse.

We concur that communicated anger is likely to trigger negative impressions in multiparty negotiations. Yet, we also argue that these negative impressions may have severe consequences because an alternative negotiation partner is highly salient. In multiparty bargaining, individuals do not have to reach an agreement with an angry opponent. They may reach an agreement with an alternative partner. Thus, the effectiveness of communicating anger hinges on whether or not individuals select an angry opponent to form a coalition. If negotiators form a coalition with an angry opponent he/she may benefit. However - and this

seems more likely - negotiators who communicate anger can be expected to be liked less, to be less likely to be included in a deal, and to obtain a smaller proportion of the payoffs.

### *The Present Research*

We tested our model in three studies. In each study participants were led to believe that they negotiated with two other players in a three-player landowner game (Van Beest, Van Dijk, & Wilke, 2004b). The participants were endowed with a parcel of 4 acres and the other two players with a parcel of 3 acres, and informed that a project developer wanted to buy 2 parcels for a prize of 70 thousand euros. This setup endowed the participant with a relatively large parcel but with equal opportunities to meet the demands of the project developer. This was done to create some tension between possible ways of allocating payoffs (Komorita & Chertkoff, 1973; Murnighan, 1991; Van Beest et al., 2004b) and thus some room for bargaining in which communications of anger would be credible. In addition, we explicitly informed participants that they could not form a grand coalition of three-players, but that the members of a two-player coalition could decide to allocate payoffs to an excluded player. This was done to address a minor issue in the coalition literature in which the decision to exclude a person from the coalition goes hand in hand with the decision to exclude that person from getting payoffs.

A difference between our studies was that anger was communicated at different phases of the negotiation process. Coalition negotiations are complex. Some deals fail. Some succeed. Some are renegotiated. Consequently, different players may thus be potentially included and excluded from a coalition at different phases of the negotiation. Reflecting these differences we explicitly manipulated anger communications of both potentially included and excluded players across the three studies and reasoned that the effectiveness of their anger communication depends on the negotiation phase. In Study 1 anger was communicated via computer generated messages after a first attempt to form a coalition had failed. In this phase



of a negotiation process we hypothesized that it would be a risky strategy to communicate anger for players who are potentially excluded. In Study 2 and Study 3 anger was communicated directly after the first proposal of a participant. In this phase of a negotiation process we hypothesized that it would be a risky strategy to communicate anger for players who are potentially included. Another difference was that we varied the number of players who communicated anger. In Study 1 and Study 2 participants were confronted with only one potential coalition partner who communicated anger whereas in Study 3 both potential coalition partners communicated anger. On a conceptual level Study 3 mimics the standard two-player situation in that participants had to reach an agreement with an angry player.

#### Study 1: The Potentially Excluded Player

Study 1 focused on the negotiation phase in which a first attempt to form a coalition has failed. In this phase potential coalition partners need to decide whether they want to retry a failed coalition attempt or to switch coalition partner. Based on previous coalition research (e.g., Kahan & Helwig, 1971; Van Beest et al., 2004a) we reasoned that in the absence of anger communication participants would respond to a failed coalition attempt by trying to form a coalition with another player. But, what if participants are confronted with an angry message from the person who they excluded in the first round? Will participants still switch coalition partner or will they retry a coalition with the person who rejected their first proposal?

Depending on experimental condition, participants received an angry message from the player who was included in the failed coalition attempt, from the player who was excluded from the failed coalition attempt, or from neither of the players. We expected participants to form negative impressions of those who communicate anger and that this would mediate their decision to switch partners. We thus expected participants to switch partner after a failed coalition attempt when not given any emotional feedback and when their potentially included

player communicated anger, but to stick with their original partner when the potentially excluded player communicated anger.

### *Method*

*Participants and design.* Participants were 120 psychology students from the University of Amsterdam (Mean age = 21.59,  $SD = 3.66$ ; 87 women, 33 men) and assigned to either the included angry, excluded angry, or control condition.

*Procedure.* Participants were seated at a computer in separate cubicles and told that they were participating in a three-player coalition game. In reality, the other players were preprogrammed computer players. We used a landowner paradigm to explain the coalition game. To increase a sense of entitlement, participants had to fill out a (bogus) landownership quiz to determine the relative size of each parcel. They learned that they were assigned to the position of player A and that they controlled a parcel of 4 acres whereas player B and player C controlled a parcel of 3 acres. Next, they were informed that a project developer pays 70 thousand euros for 2 parcels, and explicitly told that this implied that any two-player coalition could meet the demand of the project developer. To make the game more engaging, participants were informed that their experimental pay would be based upon whatever they managed to obtain during bargaining.

Following a negotiation procedure introduced by Komorita and Meek (1978), participants were informed that in each negotiation round all players would formulate an opening proposal stating with whom they wanted to form a coalition and how they wanted to allocate the payoffs. It was stressed that they could allocate payoffs to included and to excluded members of the proposed coalition. The proposals made by the preprogrammed computer players depended on the proposal of the participant. If the participant chose to form an AB-coalition, then B would propose a BC-coalition and C an AC-coalition. If the participant wanted to form an AC-coalition then B proposed an AB-coalition and C a BC-

coalition. In these simulated proposals from player B and C the payoff was always divided equally among the coalition members (i.e., 35:35). These inductions ensured that each possible coalition was presented on the computer screen, and prevented that one of the computer players proposed the same coalition as the participant.

After all proposals were made public, participants selected the proposal they wanted to execute. The choice of the computer players depended on the choice of the participant. If participants selected their own proposal, players B and C selected their own proposal. If participants selected the proposal of B then B selected the proposal of C, and C selected the proposal of A. If participants selected the proposal of C then C selected B and B selected A. This ensured that participants failed to form a coalition in the first round.

Our anger manipulation was identical to the manipulation introduced by Van Kleef and colleagues. Participants were told that in each round the computer would randomly select a player to give a comment and that these comments would be made public to all players. In the included angry condition the computer always selected the player that was included in the failed coalition (e.g., player B if the participant wanted to form an AB-coalition). In the excluded angry condition the computer selected the player that was excluded in the failed coalition (e.g., player C if the participant wanted to form an AB-coalition in round 1). In the control condition participants learned that no one was given the opportunity to comment on the negotiation. The comment that participants received was (translated from Dutch): “The proposal of A pisses me off. It doesn’t make any sense”. This sentence has been extensively tested in previous research and is indeed perceived as an angry message (Van Kleef et al. 2004a,b).<sup>1</sup>

Next, participants entered the second round of negotiation. Again, participants were informed that all players had to formulate a proposal. Different than the first round, however,

we now preprogrammed the computer players such that they always selected the coalition proposal the participant wanted to execute. This ended the negotiation.

Finally, we assessed impressions and checked the anger manipulation. Impressions were assessed by four questions about both the player that was included in the opening proposal of the participant (Cronbach's  $\alpha = .80$ ) and the player that was excluded in the opening proposal of the participant ( $\alpha = .91$ ), (translated from Dutch: "How positive was your overall impression of player B/C", "Was player B/C a nice person?", "Was player B/C a friendly person?", "Was player B/C a sympathetic person?"). The anger manipulation was checked by asking participants to indicate from whom they received an angry message (1 = from player B, 2 = from player C, 3 = from nobody). At the end of the experiment participants were thanked and debriefed. It was explained that their experimental pay would not be contingent upon bargaining performance because they had played against computer players and that they would get a flat fee of 6 euros.

### *Results*

Eighty four percent of the participants remembered correctly whether and from whom they received a message (88% in the included angry condition, 88% in the excluded angry condition, 78% in the control condition,  $\chi^2(2, n = 120) = 2.00, ns$ ). Excluding participants who gave incorrect responses did not alter the pattern of the results and all participants were retained in the analyses reported below.<sup>2</sup>

*Impressions.* Oneway analyses of variance showed that our anger manipulation affected the impression of the potentially excluded player,  $F(2,117) = 33.01, p < .001, \eta^2 = .36$ , and the potentially included player,  $F(2,117) = 16.21, p < .001, \eta^2 = .22$ . As predicted, LSD comparisons showed that impressions of both the potentially included and potentially excluded players were least positive when they communicated anger (see Table 1).

*Partner selection.* A Chi-square analysis revealed that participants switched partner more often in the control condition (80%) and included angry condition (80%), than in the excluded player angry condition (35%),  $\chi^2(2, n = 120) = 23.74, p < .001$ . As predicted, it seems especially detrimental to communicate anger when one is excluded from a failed coalition attempt (see Table 2).

*Mediation analysis.* Following Cohen, Cohen, West and Aiken (2003) we dummy coded two contrasts to describe our anger manipulation. The first contrast distinguished the included angry condition from the other two conditions. The second contrast distinguished the control condition from the other two conditions. Together they make the excluded player angry condition the referent group in the following regressions.

Based on Baron and Kenny's method (1986) to assess mediation, we conducted three sets of regression analyses. The first set of regressions showed that our anger manipulation predicted partner selection ( $\beta_{included} = .45, t = 4.65, p < .001$ ;  $\beta_{control} = .45, t = 4.65, p < .001$ ). The second set of regressions showed that our anger manipulation predicted our mediator, impressions of the potentially excluded players ( $\beta_{included} = .60, t = 7.05, p < .001$ ;  $\beta_{control} = .60, t = 7.03, p < .001$ ). The third set of regressions showed that the impressions of the potentially excluded players predicted partner selection ( $\beta = .37, t = 3.77, p < .001$ ), and showed that this reduced the effect of our anger manipulation on partner selection ( $\beta_{included} = .22, t = 2.05, p < .04$ ;  $\beta_{control} = .220, t = 2.06, p < .04$ ). Sobel tests showed that this reduction was statistically significant for both the contrast that distinguished the included condition from the other two conditions ( $Z_{included} = 2.93, p < .003$ ) and the contrast that distinguished the control condition from the other two conditions ( $Z_{control} = 2.93, p < .003$ ). This indicates that the effect of our anger manipulation on partner selection is partially mediated by impressions of potentially excluded coalition partners.

*Payoff.* Allocations are interdependent. What participants do not allocate to the other players is by definition allocated to the participant. We therefore restricted our analyses to payoffs that were allocated to both other players. A 3 (condition) x 2 (allocation: to potentially included player, to potentially excluded player) repeated measures analysis with allocation as within variable yielded an allocation effect,  $F(1,117) = 12.25, p = .001, \eta^2 = .10$ , that was qualified by an interaction between allocation and condition,  $F(2,117) = 13.54, p = .001, \eta^2 = .19$ . LSD comparisons showed that both the potentially included players and the potentially excluded player obtained fewer euros when they communicated anger than when they did not communicate anger (see Table 3). Extending the analysis of partner selection, this shows that players who communicate anger also suffer in terms of payoffs.

*The lucky few.* To complete our analysis we assessed whether (and which) angry players may benefit on those rare occasions that they are included in the final coalition. For this post hoc analysis, we constructed a factor called Inclusion, consisting of two levels denoting whether or not angry players were eventually included in round 2. A 3(condition) x 2(inclusion) ANOVA yielded a main effect of inclusion,  $F(1,114) = 2765.90, p < .001, \eta^2 = .95$ . Not surprisingly, participants gave more to players who were included ( $M = 32.91, SD = 4.16$ ) in the final coalition than to players who were excluded in the final coalition ( $M = .22, SD = 1.37$ ). The more interesting finding was that the analysis yielded condition effect,  $F(2,114) = 2.99, p < .05, \eta^2 = .05$ , that was qualified by an interaction with inclusion,  $F(2,114) = 4.60, p < .03, \eta^2 = .08$ . As can be seen in Table 4, this interaction effect is driven by differences in payoffs allocated to players who are included in the final coalition. Potentially excluded angry players who got included were given more euros than (a) potentially included angry players who remained included, and (b) even given more euros than potentially excluded players who did not communicate anger and got included.

*Discussion*

In Study 1 we assessed how communicating anger affects coalition behavior when a first attempt to reach an agreement has failed. Results showed that participants form negative impressions of angry players and that these impressions mediated subsequent coalition behavior. Participants switched partners when players included in the failed attempt communicated anger, but stayed when players excluded in the failed attempt communicated anger. This supports our proposition that when negotiations fail it is especially detrimental to communicate anger for the players who were not included in the failed coalition attempt. After all, if these players would have suffered in silence, they would have been included in the next attempt.

In agreement with results obtained in bilateral negotiations financial gains are possible for those few potentially excluded players who communicated anger, but were nevertheless included in the final coalition. The current results show that these players were given more euros than potentially included players who communicated anger and remained included, and even more than potentially excluded players who did not communicate anger and got included. This shows that communicating anger is especially a risky gamble for excluded players of a failed coalition attempt. Their chances of being included in a coalition are strongly reduced when they communicate anger. But - consistent with prior research on two-party negotiation – on those rare occasions that participants choose to include them, they obtain high outcomes.

**Study 2: The Potentially Included Player**

To continue our analysis of how anger affects behavior in multiparty bargaining we focused on a different negotiation phase in Study 2. Different than Study 1, participants were now confronted with an angry message *after* their opening proposal but *prior* to any behavioral feedback of the other players. Depending on condition the included player of the

opening proposal, the excluded player of the opening proposal, or none communicated anger. This ensured that the communicated anger was only directed at the participants' opening offer and not also in part a response to a failed coalition attempt. Directly after, participants were asked whether they wanted to alter their opening proposal.

As in Study 1 we expected participants to form negative impressions of angry players, be less likely to include angry players in a final coalition, and allocate fewer euros to angry players than to non-emotional players. An important difference with Study 1 is that we now expected that communicating anger should be especially risky for potentially included coalition players. Stressing the negative consequence of communicating anger, it seems likely that in an ongoing negotiation potentially included players will remain included if they remain silent and do not communicate anger. Instead, by communicating anger, potentially included players run the risk of becoming excluded and obtaining fewer payoffs. Yet, stressing the beneficial aspects of pursuing a risky strategy, it also implies that now potentially included players who communicate anger should benefit if they remain included in the final coalition.

### *Method*

*Participants and design.* Participants were 81 students from Leiden University (15 males, 66 females, Mean age = 19.38,  $SD = 1.93$ ) and assigned to either the included angry, excluded angry, or control condition.

*Procedure.* The procedure of Study 2 was based on the procedure of Study 1. The only difference was that we selected a different moment to introduce our anger manipulation and thus a slightly different negotiation procedure. Following a negotiation procedure introduced by Van Beest et al. (2004a) participants were informed that only one player would be given the opportunity to formulate an opening proposal in each round. They were told that the computer would randomly select a player, but we preprogrammed the computer that it would



always select the participant. In their opening proposal, participants were instructed to disclose with whom they wanted to form a coalition and how they wanted to allocate the payoffs. Subsequently, depending on condition, the included coalition player, the excluded coalition player, or nobody commented on the proposal. After this, participants could adjust their proposal. This was then sent to the other simulated players who were preprogrammed to accept it.

Participants ended the experiment by filling out the small questionnaire assessing impressions (potentially included player,  $\alpha = .92$ ; potentially excluded player,  $\alpha = .93$ ) and whether participants understood from whom they got an angry message (1 = from player A, 2 = from player B, 3 = from nobody). Finally, participants were thanked, debriefed and paid 6 euros.

### *Results*

Ninety four percent of all participants correctly remembered whether and from whom they received a message (96% in the included player angry condition, 93% in both the excluded player angry and the control condition;  $\chi^2 < 1$ ). Excluding participants who gave incorrect responses did not alter the pattern of the results and these participants were therefore retained in the analyses reported below.<sup>2</sup>

*Impressions.* Oneway analyses of variance showed that anger feedback affected impressions of both the potentially included,  $F(2,78) = 30.23, p < .001, \eta^2 = .44$ , and potentially excluded players,  $F(2,78) = 18.69, p < .001, \eta^2 = .32$ . As in Study 1, LSD comparisons showed that impressions of both the potentially included and potentially excluded players were least positive when they communicated anger (See Table 5).

*Partner selection.* A Chi-square analysis revealed that participants switched partner more often in the included angry condition (70%) than in the excluded angry condition (30%)

and control condition (22%),  $\chi^2(2, n = 81) = 15.03, p < .001$ . As predicted, it seems especially detrimental to communicate anger when one is included in an opening proposal (see Table 6).

*Mediation analysis.* To capture our anger manipulation we again computed two contrasts. The first contrast distinguished the excluded condition from the other two conditions. The second distinguished the control condition from the other two conditions. Together they make the included angry condition the referent group in the following regressions.

The first set of regressions showed that our anger manipulation affected partner selection ( $\beta_{\text{excluded}} = -.39, t = -3.31, p < .001$ ;  $\beta_{\text{control}} = -.46, t = -3.91, p < .001$ ). The second set of regression showed that our anger manipulations affected impressions of the potentially included players ( $\beta_{\text{excluded}} = .68, t = 6.98, p < .000$ ;  $\beta_{\text{control}} = .63, t = 6.45, p < .000$ ). The third set of regressions showed that impressions predicted partner selection ( $\beta = -.50, t = -3.96, p < .001$ ), and that this reduced the effect of the anger manipulation on partner selection to non-significance ( $\beta_{\text{excluded}} = -.05, t = -.37, p < .71$ ;  $\beta_{\text{control}} = -.15, t = -1.11, p < .27$ ). Sobel tests showed that this reduction was statistically significant for both contrasts ( $Z_{\text{excluded}} = 2.54, p < .01$ , and  $Z_{\text{control}} = 2.78, p < .005$ ). As predicted, participants form negative impressions of potentially included players who communicate anger and this mediated their decision to continue forming a coalition with them.

*Payoff.* A 3 (condition) x 2 (allocation: to potentially included player, to potentially excluded player) repeated measures analysis with allocation as within variable yielded only an interaction between allocation and condition,  $F(2,78) = 9.24, p = .001, \eta^2 = .19$ . Further LSD comparisons to determine the nature of this interaction showed that (a) potentially included players obtain fewer euros in the included angry condition than the other two conditions, and (b) that potentially excluded players obtain more euros in the included angry condition than the other two conditions (see Table 7).

*The lucky few.* To assess whether (and which) angry players may benefit on those rare occasions that they are included in the final coalition we conducted a 3 (condition) x 2 (inclusion) ANOVA. This analysis yielded a main effect of inclusion,  $F(1,81) = 658.92, p < .001, \eta^2 = .90$ , showing that it is detrimental for one's payoffs to be excluded ( $M_{in} = 30.48, SD = 5.05$  vs.  $M_{ex} = 1.77, SD = 4.02$ ). The more interesting finding is that the analysis yielded an interaction,  $F(2,81) = 3.21, p < .05, \eta^2 = .08$ . As can be seen in Table 8, this effect is driven by players who were included in the final coalition: Potentially included angry players who remained included were given more euros than (a) potentially excluded angry players who got included, and (b) even more than potentially included players who did not communicate anger and remained included.

### *Discussion*

In Study 2 participants were confronted with an angry message when they could still change their opening offer. Similar to Study 1, communicating anger backfired in the majority of cases. Participants formed negative impressions of angry players and decided to exclude them from the coalition, which in turn had a detrimental effect on their payoffs. Angry players obtained virtually nothing when excluded from a coalition.

Stressing the timing of communicating anger, it was now especially a risky strategy for those players who were included in the opening offer of a participant. On those rare occasions that these players remained included in the final coalition, they obtained more euros than potentially included players who did not communicate anger, or potentially excluded players who did communicate anger. Consistent with Study 1, this again shows that those who are most likely to suffer from communicating anger are also those who can benefit most.

### Study 3: Nowhere to Run

The previous two studies showed that participants form negative impressions of angry players and that they rather continue their negotiation with a player that does not

communicate anger. In contrast to two-party negotiations in which communicating anger may yield a concession from the other party we observed that participants rather form another coalition than yield to the angry player. However, consistent with two-party negotiation, we also observed that on those rare occasions that participants did decide to form a coalition with an angry player they seem to yield. In both Study 1 and Study 2, we observed that those who are most likely to suffer when communicating anger are also those who are most likely to benefit.

In Study 3 we again asked participants to formulate an opening proposal, but also inserted a condition in which both the potentially included and potentially excluded player communicated anger. This ensured that participants could not walk away from anger by trying to negotiate with the other (non-angry) party. To reach an agreement, they now had to negotiate with an angry player. On a conceptual level this mimics the standard two-player situation of previous anger research in which participants need the angry opponent to reach an agreement. Consistent with the underlying argument that individuals want to avoid impasse (Sinaceur & Tiedens, 2006; Van Kleef et al. 2004a,b), and extending our finding that angry players may benefit when they are chosen to be included in a coalition, we predicted that participants would yield when they have to form a coalition with a player who communicates anger.

#### *Method*

*Participants and design.* Participants were 84 students from Leiden University (Mean age = 20.5,  $SD = 3.0$ ; 66 women, 18 men) and assigned to one either the included angry, excluded angry, or both angry condition.

*Procedure.* The procedure was identical to Study 2. After participants formulated an opening proposal they were presented with a message from either the potentially included player, the potentially excluded player, or both players. Unlike the previous two studies we used two messages to convey anger. These messages have been tested in previous research

and have found to be similar in strength (Van Kleef et al., 2004a). One message stated “This proposal makes me angry! It does not make any sense”. The other message stated “This proposal is outrageous. It pisses me off!”. In the included angry and the excluded angry conditions it was randomly determined by the computer which message was presented to the participant. In the both angry condition it was randomly determined which of these two messages was sent by the potentially included and which was sent by the potentially excluded player. Since there were no order effects, we dropped order from the analyses.

Participants ended the experiment by filling out the small questionnaire assessing impressions of the potentially included player ( $\alpha = .91$ ), the potentially excluded player ( $\alpha = .92$ ), and whether participants understood from whom they got an angry message (1 = from player A, 2 = from player B, 3 = from both players). Different than the previous two studies we now made the game more engaging by informing participants that their bargaining performance would enable them to win a bonus of 50 euros. After participants were thanked, debriefed and paid a flat fee of 6 euros, we selected from each condition the participant who had obtained the most payoffs. These participants were given a bonus of 50 euros each.

### *Results.*

76 out of 84 participants correctly remembered who communicated anger (86% in included player angry condition, 93% in the excluded player angry condition, 93% in the both angry condition,  $\chi^2 < 1$ ). Excluding participants who gave the wrong answer did not alter the results and these participants were therefore retained in the analyses reported below.<sup>2</sup>

*Impressions.* Oneway analyses showed that anger feedback had a similar impact on the impression of the potentially included player,  $F(2, 81) = 25.74, p < .001, \eta^2 = .39$ , as on the impression of the potentially excluded player,  $F(2, 81) = 34.93, p < .001, \eta^2 = .46$ . Similar to the previous two studies, LSD comparisons showed that participants formed less positive

impressions of potentially included players in the included player angry condition, and of potentially excluded players in the excluded player angry condition (see Table 9).

*Partner selection.* A Chi-square analysis revealed that participants switched partners more often in the included player angry condition (80%) and the both angry condition (67%), than in the excluded player angry condition (21%),  $\chi^2(2, N = 84) = 21.22, p < .001$ . Similar to the previous two studies, this shows that participants do not want to joint forces with players who communicate anger (see Table 10). The fact that participants also switched partner in the both angry condition is consistent with our reasoning that it is especially detrimental to communicate anger for potentially included players when negotiations have just begun.

*Mediation analysis.* To capture our anger manipulation we again computed two contrasts. This first contrasts distinguished the included condition from the other two conditions. The second contrast distinguished the both angry condition from the other two conditions. Together they make the excluded player angry condition the referent group in the following regressions.

The first set of regressions showed that the anger manipulation predicted partner selection ( $\beta_{included} = .55, t = 4.99, p < .001$ ;  $\beta_{both} = .42, t = 3.84, p < .001$ ). The second set of regressions showed that the anger manipulation affected impressions of the potentially included players ( $\beta_{included} = -.65, t = -6.50, p < .001$ ;  $\beta_{both} = -.59, t = -5.88, p < .001$ ). The third regression showed that these impressions predicted partner selection ( $\beta = -.50, t = -4.57, p < .001$ ), and that this reduced the effect of the anger manipulation on partner selection to non-significance ( $\beta_{included} = .22, t = 1.84, p < .07$ ;  $\beta_{both} = 1.08, t = 1.08, p < .28$ ). Sobel tests showed that this reduction was statistically significant for both contrasts ( $Z_{included} = 3.37, p < .001$ , and  $Z_{both} = 2.94, p < .003$ ). As predicted, participants form negative impressions of players who communicate anger and this mediated their decision to form a coalition with them.

*Payoff.* A 3(condition) x 2(allocation: to potentially included player, to potentially excluded player) repeated measures analysis was used to assess payoff allocations (See Table 11). Replicating the results of the previous studies, this analysis yielded an interaction between allocation and condition,  $F(2,81) = 14.63, p = .000, \eta^2 = .27$ . LSD comparisons to interpret this interaction showed that the potentially included players obtain fewer euros in the included player angry condition than in the other two conditions, and that the potentially excluded players obtain fewer euros in the excluded player angry condition than the other two conditions.

Consistent with our hypothesis that participants will give themselves less payoffs when both other parties communicate anger, the results also yielded a main effect of condition,  $F(2,81) = 4.75, p = .001, \eta^2 = .11$ . As predicted, LSD comparisons showed that participants allocated themselves fewer euros in the both angry condition than in the other two conditions.

*The lucky few.* Finally, we assessed whether (and which) angry players may benefit if they are included in a coalition (see Table 12). A 3 x 2 ANOVA yielded a main effect of inclusion  $F(1,77) = 1054.25, p < .001, \eta^2 = .92$ , showing that angry players are given more euros when included in the final coalition ( $M = 30.40, SD = 4.39$ ) than when excluded from the final coalition ( $M = 1.05, SD = 3.37$ ). It also yielded a main effect of condition,  $F(2,77) = 8.06, p < .001, \eta^2 = .17$ , which was qualified by an interaction of condition and exclusion,  $F(2,77) = 3.09, p < .05, \eta^2 = .07$ . LSD comparisons showed that the potentially included angry players in the both angry condition who remained included obtained most euros. Consistent with the previous two studies, this shows that the player who is likely to suffer most, is also the player that benefits most from communicating anger.

### *Discussion*

In Study 3 participants had to deal with a player who communicated anger. Based on our reasoning that communicating anger in multiparty negotiation backfires because

individuals can walk away, we reasoned that participants would yield to angry players when they cannot walk away. As predicted, participants gave themselves fewer euros when both players were angry than when one player was angry. Confidence in our findings is further increased by the fact that we used two different messages to convey anger. We did not find any order effects, showing that our results are not limited to one specific angry message.

Similar to Study 2, it was again more risky for potentially included players than for potentially excluded players to communicate anger. On the one hand, the data on partner selection clearly showed that individuals did not want to continue a coalition with a potentially included player even when the potentially excluded player is also angry. On the other hand, the data on the lucky few showed that potentially included players who communicate anger get most when they remain included.

#### General Discussion

Results of three studies revealed that communicating anger has a profound impact on three-party negotiation. As predicted, anger backfires when individuals can walk away. In Study 1 participants adjusted their behavior when an initial attempt to form a coalition failed. Participants rather retry forming a coalition that has failed than start a new coalition with another party who communicates anger. In Study 2 participants adjusted their preference even when they did not know whether the other would have accepted their initial proposal. Individuals did not want to continue their attempt to form a coalition when their preferred player communicates anger. In Study 3, participants were confronted with two angry opponents. Extending the finding of Study 1 and 2 showing that the lucky few angry players who were included did benefit, participants yielded when they could not walk away.

Another aspect of our studies is that we obtained our findings in a setting in which coalition membership did not automatically determine whether or not one could obtain payoffs. Following Thibaut and Kelley (1959) who defined a coalition as “two or more



persons who act jointly to affect the outcomes of one or more other persons” (p. 2005) and Van Beest and Van Dijk (2007) who noted that these other persons need not necessarily be coalition members, we separated these decisions and observed that both decisions are affected by our anger manipulation. Participants do not want to be in coalitions with angry players and they do not want to allocate payoffs to angry players.

There are important differences between the three studies. In Study 1 communicating anger decreased the chances of potentially excluded players to get included. In Study 2 and 3 communicating anger decreased the chances of potentially included players to remain included. Moreover, in Study 1 the effects of communicated anger on partner selection were mediated by impressions of potentially excluded players. In contrast, in Study 2 and 3 the effects were mediated by impressions of potentially included players. These differences between the studies highlight that timing is crucial. It shows that communicating anger is especially a risky strategy for *excluded* players when a first attempt to reach an agreement has failed, whereas communicating anger appears to be especially risky for *included* players when negotiations have just begun.

#### *Coalition Formation*

The current research is the first to assess the impact of anger communication on coalition bargaining. For long, social psychological theories on coalition formation were based on rational choice models predicting how people maximize their own payoffs in coalition formation (Komorita & Parks, 1995; Murnighan, 1978). Recently, research has taken a more motivational approach, stressing that coalition formation is also affected by fairness concerns (Van Beest et al., 2004a, b). We continued this shift in thinking by moving from “cold” rational or motivational approaches to “hot” emotional processes (Thompson, Nadler, Kim, 1999). In a situation in which rational choice models would predict that each

coalition should be equally likely, we showed that introducing a hot component predicts who gets included and how payoffs are allocated.

A traditional finding in the coalition literature is that players are likely to exclude those providing many resources. This “strength is weakness” effect (Vinacke & Arkoff, 1957; Gamson, 1964; Komorita, 1984; Miller & Crandall, 1980; Murnighan, 1991) is based on the assumption that players do not want to join forces with potential partners who they assume will demand a large payoff share because it will lower their own outcome. Put differently, players assume that they are more likely to maximize their own outcome if they join forces with a weak partner than with a strong partner. In terms of the strength is weakness language it could thus be argued that we observed an “anger is weakness” effect. By communicating anger players decreased their chances of being included. Given that our findings were mediated by impressions – a variable that was not measured in previous coalition research – further research may test whether the traditional strength is weakness effect is in part also instigated by impressions. Regarding our anger is weakness effect further research may test whether impressions are based on the communicated anger and/or on the possible underlying message that those who communicate anger seem to expect a larger payoff share.

#### *Bilateral Negotiations*

Our findings can be compared with research on two-party negotiations that has documented beneficial effects of communicating anger (Sinaceur & Tiedens, 2006; Van Kleef et al., 2004a, b, 2006). At first sight our findings are in sharp contrast with this statement. Yet, we want to stress that our findings are not in disagreement with the underlying reasoning. We too assumed that anger communicates a pressure to yield because participants want to avoid impasse. Consistent with this reasoning we observed that participants do yield when they chose to form a coalition with an angry player or when they were forced to form a coalition with an angry player. However, we also argued that

participants have other options to avoid impasse. Instead of yielding, individuals can select another partner to reach an agreement. Consistent with this argument we observed that the majority of the participants chose this route to deal with an angry opponent. They just avoided dealing with an angry counterpart and struck a deal with a non-angry player. On a more general level, we believe that our studies are a good example of how introducing an extra player to the negotiation table does indeed increase the complexity of the situation.

Our work extends previous work on the moderating role of power in bilateral negotiations. By now a series of studies have demonstrated that relatively powerless individuals tend to concede in response to a counterpart's communicated anger, whereas relatively powerful negotiators tend to be impervious to their opponent's emotions (Sinaceur & Tiedens, 2006; Van Kleef et al., 2004b, 2006). In some of these experiments power was manipulated by providing participants with plenty (high power) or no (low power) alternative negotiation partners, based on the idea that having alternatives reduces one's dependence on the other party and therefore instills a sense of power (e.g., Pinkley, 1995; Thibaut & Gruder, 1969). Interestingly, the present study shows that providing all the parties in the negotiation with a highly salient alternative negotiation partner has an even stronger moderating influence on the effects of anger communications in multiparty negotiation. In contrast to previous studies where the (un)availability of alternatives was found to switch the beneficial effects of anger on or off, the present data indicate that having a salient and easily accessible alternative coalition partner may actually turn the effects of anger around, and produce detrimental instead of less beneficial effects.

A concern that may be raised is that we focused on three-player games in which each coalition yielded the same payoffs and each player had an equal number of alternatives to form a coalition. A possible next step would thus be to introduce power asymmetries in a coalition setting. For example, some players could be given more opportunities to form

alternative coalitions than others, or some coalition could provide better payoffs than others. This would allow a further understanding of coalition dynamics by testing whether players will maximize their payoffs by forming minimal coalitions in terms of power (e.g., Gamson, 1961) when anger is communicated by those who are needed to maximize one's outcomes. We showed that participants will actively exclude those who communicate anger in a situation in which players are equal in power. Introducing power asymmetries may establish some boundary conditions by testing whether negotiators will also actively exclude those who communicate anger when such players are more critical than others to attain good payoffs.

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## Footnotes

<sup>1</sup> We tested the angry message in a coalition scenario ( $N = 40$ ). Participants read a scenario in which they had made an offer to a player who then responded with the angry message or not. Next, we asked participants to evaluate the emotional disposition of the opponent. Not surprisingly and consistent with the results obtained in bilateral negotiation, participants believed that the opponent was more angry when they received the angry message than when they did not receive a message.

<sup>2</sup> As expected most participants demanded more than an equal share of the payoffs in their opening offer (76% in Study 1, 82% in Study 2, 85% in Study 3). Yet, a critic may argue that a considerable number of participants made an offer in which they gave an equal share to their coalition partner after which it may be less credible to receive an angry message from their opponent. To test whether this affected our results, we reran all analyses with this allocation preference as a covariate in each of the three studies, and conducted specific analyses excluding participants who demanded equality in their opening offer. Both these analyses yielded identical findings as an analysis including all participants. We therefore decided to use all participants in the reported analyses and are confident that the results on impressions, partner selection and final payoff allocation cannot be explained by differences in allocation preference and credibility of our anger manipulation.

Table 1

*Impressions of fellow players in Study 1*

	Included Angry		Excluded Angry		Control	
	condition		condition		condition	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Potentially included player	3.01 <sub>a</sub>	1.11	4.31 <sub>b</sub>	1.14	4.23 <sub>b</sub>	0.88
Potentially excluded player	4.68 <sub>b</sub>	0.82	3.16 <sub>a</sub>	1.11	4.68 <sub>b</sub>	0.92

*Note.* Means in the same row that do not share subscripts differ at  $p < .05$  in the LSD comparison.

Table 2

*Partner selection in Study 1 (frequencies)*

	Included Angry condition	Excluded Angry condition	Control condition
Potentially included player	8	26	8
Potentially excluded player	32	14	32

Table 3

*Means and standard deviations of final payoff allocation in Study 1*

	Included Angry		Excluded Angry		Control	
	Condition		condition		condition	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Self	37.4	3.8	35.4	3.7	36.4	3.6
Potentially included player	6.53 <sub>a</sub>	12.72	22.43 <sub>b</sub>	16.98	7.50 <sub>a</sub>	13.93
Potentially excluded player	26.10 <sub>b</sub>	13.39	12.18 <sub>a</sub>	16.90	26.10 <sub>b</sub>	13.58

*Note.* Means in the same row that do not share subscripts differ at  $p < .05$  in the LSD comparison.

Table 4

*Means and standard deviations of payoffs as a function of condition and partner selection in*

*Study 1*

	Included Angry		Excluded Angry		Control	
	Condition		condition		condition	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Angry in	30.75 <sub>a</sub>	6.78	34.79 <sub>b</sub>	3.14	32.62 <sub>a</sub>	3.51
Angry out	0.47	1.95	0.00	0.00	0.00	4.31

*Note.* Angry in = payoffs obtained by included angry players. Angry out = payoffs obtained by excluded angry players. Means in the same row that do not share subscripts differ at  $p < .05$  in the LSD comparison.

Table 5

*Impressions of fellow players in Study 2*

	Included Angry		Excluded Angry		Control	
	condition		condition		condition	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Potentially included player	3.01 <sub>a</sub>	(1.12)	4.94 <sub>b</sub>	(1.25)	4.79 <sub>b</sub>	(0.73)
Potentially excluded player	4.96 <sub>b</sub>	(1.02)	3.27 <sub>a</sub>	(1.35)	4.47 <sub>b</sub>	(0.62)

*Note.* Means in the same row that do not share subscripts differ at  $p < .05$  in the LSD

comparison. Higher numbers imply more positive impressions.



Table 6

*Partner selection in Study 2 (frequencies)*

	Included Angry condition	Excluded Angry condition	Control condition
Potentially included player	8	19	21
Potentially excluded player	19	8	6

Table 7

*Means and standard deviations of final payoff allocation in Study 2*

	Included Angry		Excluded Angry		Control	
	Condition		condition		condition	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Self	37.00	4.90	39.60	6.50	39.40	4.7
Potentially included player	10.56 <sub>a</sub>	15.29	20.33 <sub>b</sub>	13.42	24.07 <sub>b</sub>	12.85
Potentially excluded player	22.41 <sub>b</sub>	13.31	10.04 <sub>a</sub>	13.01	6.52 <sub>a</sub>	12.13

*Note.* Means in the same row that do not share subscripts differ at  $p < .05$  in the LSD comparison.

Table 8

*Means and standard deviations of payoffs as a function of condition and partner selection in*

*Study 2*

	Included Angry		Excluded Angry		Control	
	condition		condition		condition	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Angry in	33.12 <sub>b</sub>	(3.87)	27.87 <sub>a</sub>	(7.29)	30.47 <sub>a</sub>	(4.08)
Angry out	1.05	(3.15)	2.52	(4.79)	1.66	(4.08)

*Note.* Angry in = payoffs obtained by included angry players. Angry out = payoffs obtained by excluded angry players. Means in the same row that do not share subscripts differ at  $p < .05$  in the LSD comparison.

Table 9

*Impressions of other players in Study 3*

	Included Angry		Excluded Angry		Both Angry	
	condition		condition		condition	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Potentially included player	2.83 <sub>a</sub>	1.08	4.66 <sub>b</sub>	0.74	2.98 <sub>a</sub>	1.29
Potentially excluded player	5.25 <sub>c</sub>	0.69	3.14 <sub>a</sub>	0.98	3.76 <sub>b</sub>	1.21

*Note.* Means in the same row that do not share subscripts differ at  $p < .05$  in the LSD comparison.

Table 10

*Partner selection in Study 3 (frequencies)*

	Included Angry condition	Excluded Angry condition	Both Angry condition
Potentially included player	6	22	9
Potentially excluded player	23	6	18

Table 11

*Means and Standard deviations of final payoff allocation in Study 3*

	Included Angry		Excluded Angry		Both Angry	
	condition		condition		condition	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Self	39.8 <sub>b</sub>	6.2	41.5 <sub>b</sub>	7.7	36.6 <sub>a</sub>	3.1
Potentially included player	5.24 <sub>a</sub>	11.40	22.04 <sub>c</sub>	12.44	12.63 <sub>b</sub>	15.62
Potentially excluded player	24.93 <sub>b</sub>	11.18	6.46 <sub>a</sub>	11.17	20.78 <sub>b</sub>	14.93

*Note.* Means in the same row that do not share subscripts differ at  $p < .05$  in the LSD comparison.

Table 12

*Means and standard deviations of payoffs as a function of condition and partner selection in Study 3*

	Included Angry		Excluded Angry		Both Angry	
	condition		condition		condition	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Angry in	30.33 <sub>a,b</sub>	4.76	26.83 <sub>a</sub>	3.76	33.33 <sub>b</sub>	2.50
Angry out	.22 <sub>a</sub>	1.04	.91 <sub>a,b</sub>	2.51	2.28 <sub>b</sub>	5.46

*Note.* Angry in = payoffs obtained by included angry players. Angry out = payoffs obtained by excluded angry players. Means in the same row that do not share subscripts differ at  $p < .05$  in the LSD comparison.